

DIETETICS PRACTICE AND CULTURALLY SAFE CARE IN THE DIVERSE PACIFIC REGION

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ABSTRACT

Introduction. The prevalence of non-communicable disease (NCD) rates in the diverse Pacific region is deeply concerning. The impact of these diseases and associated complications is overwhelming to families and communities and are a common point of discussion in medical, political and social domains. While much research has been dedicated to the prevention and treatment of NCDs, less research is focused on interactions between health care practitioners and their patients with NCDs. With the Pacific region representing a very diverse community of Indigenous peoples, migrated groups and new-comers; this creates a consequential mix in cultural worldviews and values. Health care providers are challenged with recognizing and understanding these cultural values. Registered Dietitian Nutritionists (RDNs) are particularly challenged as their scope of practice includes having knowledge and expertise in the dietary and lifestyle values of the populations they serve. Cultural safety, a theory of practice in regions with similar demographics as the Pacific, will be used to guide and inform this research.

Objectives. To examine the practice of dietetics in the Pacific region to understand specific needs and unique practices relevant to the culturally diverse populations served. To identify dimensions of dietetics practice that describe culturally safe care.

Methods. Descriptive analysis will be conducted using data from a dietetics practitioner survey. Interpretative Phenomenological Analysis will be used to identify RDN experiences that reveal culturally safe care in the Pacific from key informant interviews.

Findings. Survey results describe the practice of dietetics in the Pacific region (n=106), by demographics of RDNs and populations served, and RDN identified needs for culturally relevant and disease-specific nutrition resources, particularly resources for Pacific Islander and Asian populations and NCDs.

Key informant interviews (n=18) of practicing dietitians in the Pacific reveal dimensions of cultural safety in the following themes: (i) self-awareness and self-reflection to one's own historical and social culture and location; (ii) relationship building and creating an environment of respect, caring, trust, empathy, and acceptance between client/patient and RDN; (iii) working through a social justice lens, recognition of power imbalance or struggles, and potential for repressed cultural identities as described through their practice experiences.

Conclusion. Understanding dietetics practice in the Pacific as unique with needs specific to the region is important to inform the identification and development of the necessary nutrition resources to enhance dietetics practice and patient care experiences.

Identifying and describing practice experiences of culturally safe care could inform new practice guidelines in the dietetics profession. This has promising implications for improving health care services in the Pacific region, and to places where Pacific groups have migrated in other parts of the world.

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LIST OF ABBREVIATIONS

AFN	Assembly of First Nations
AI/AN	American Indian/Alaskan Native
AND	Academy of Nutrition and Dietetics
CDR	Commission on Dietetic Registration
CNMI	Commonwealth of the Northern Mariana Islands
CPEU	Continuing Professional Education Unit
DHHS	Department of Health and Human Services
DMIS	Data Management Information System
ET	Endotracheal Tube
FAQ	Frequently Asked Questions
FSM	Federated States of Micronesia
HAND	Hawai'i Academy of Nutrition and Dietetics
IOM	Institute of Medicine
IPA	Interpretative Phenomenological Analysis
MCAT	Medical College Admission Test
MNT	Medical Nutrition Therapy
NAHO	National Aboriginal Health Organization
NCD	Non-Communicable Disease
NH/PI	Native Hawaiian/Pacific Islander
NIH	National Institutes of Health
OI	Outer Island

LIST OF ABBREVIATIONS (cont.)

PDF	Portable Document Format
PHSA	Provincial Health Services Authority
PIHOA	Pacific Island Health Officers' Association
RDN	Registered Dietitian Nutritionist
RD	Registered Dietitian
RMI	Republic of the Marshall Islands
TJC	The Joint Commission
TOM	Two or More Races
URL	Uniform Resource Locator
US	United States
USAP	United States Affiliated Pacific
USAPI	United States Affiliated Pacific Island

CHAPTER ONE

INTRODUCTION

The “practice of dietetics” is defined by the Academy of Nutrition and Dietetics (AND) as “[Registered Dietitian Nutritionists] RDNs [whom] provide medical nutrition therapy (MNT), nutrition education and counseling, care coordination and management to address prevention and treatment of one or more acute or chronic conditions¹.”

Practicing dietetics in the Pacific proves challenging with the prevalence of nutrition related chronic diseases such as obesity, diabetes, cardiovascular and renal disease particularly in the Indigenous and Pacific Island populations^{2,3}. For purposes of this research, the Pacific region will be defined as the United States Affiliated Pacific (USAP) region which includes American Samoa, Commonwealth of the Northern Mariana Islands, the Freely Associated States of Micronesia (including the countries of the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands), Guam, and Hawai‘i.

The USAP region is rich with histories and stories about healthy, self-sustaining communities extending back to pre-colonial or, “pre-contact” time. During the pre-colonial time the Indigenous Peoples of the USAP region were described as healthy⁴.

“Most Pacific economies were based on wide social networks and subsistence livelihoods that made the Pacific view of food and land very different from that of the colonists. The social networks and land were more important for determining identity and traditional ties than for providing food, with food often seen as a means of expressing social relationships. Health was a group concept - a shared

sense of well-being - and food had symbolic and economic importance rather than being valued as a biological necessity⁴.”

Towards the end of the 1700's, contact from other countries began the colonial period. Traditional cultures and their sovereign food systems were lost. New foods and cooking methods were adopted, influenced by trade and food aid^{4,5}. A region, once free of processed foods, adopted a dependency on these easy-to-get, high fat, high sugar imported foods. Thus, the people of the USAP region experienced new diseases, such as diabetes, hypertension, obesity and cardiovascular diseases^{4,5}. Today, the rates of chronic disease in the Pacific Island populations are high. Ichiho et al writes, “Non-communicable diseases, including diabetes, have been identified as an emergency in the USAP islands. Some of the highest rates of diabetes and other chronic diseases are experienced by Pacific Islanders³.”

One of the first modes of treatment in the management of chronic (non-communicable) diseases is nutrition intervention. As credentialed nutrition practitioners, RDNs must maintain professional competencies including cultural competency skills which became mandatory for all RDNS in 2009^{6,7}. Culturally competent dietetics practice is defined by AND as nutrition counseling and intervention skills relevant to each population served. Cultural competency demonstrates knowledge and sensitivity to a population's culture and their food systems⁸.

The importance of cultural competency has been acknowledged by the highest levels of health care in the United States (US). The National Institutes of Health (NIH) recognizes that “cultural competency is critical to reducing health disparities [including chronic

diseases] and improving access to high quality health care, health care that is respectful of and responsive to the needs of diverse patients⁹.” Since the early 1990’s, cultural competency has become a major requirement in quality health care focused on the behavior and skills of the practitioner to be competent to work with diverse populations⁹.

“Cultural Safety”, a concept developed by Indigenous Māori nurse leaders in Aotearoa (New Zealand), has not been widely considered in the US. The theory of cultural safety “extends the notion of transcultural [care], with its focus on understanding the health beliefs and practices of different ethno-cultural groups, to include power inequities, individual and institutional discrimination, and the dynamics of health care relations in the postcolonial context¹⁰.” Richardson describes this concept of patient care in nursing to include “effective nursing of patients from other cultures by nurses who have undertaken a process of reflection on their own cultural identity and recognize the effect of their culture on their nursing practice¹⁰.” The concept of cultural safety differs from cultural competency in that cultural safety involves acknowledging the existence of unequal relations of power usually surrounding a history of colonialism. Another distinguishing feature of cultural safety is its focus on the client’s experience as determining whether the care is culturally safe. Cultural safety as a distinct paradigm shift challenges the Western traditional concept of cultural competency, making it difficult to understand¹¹.

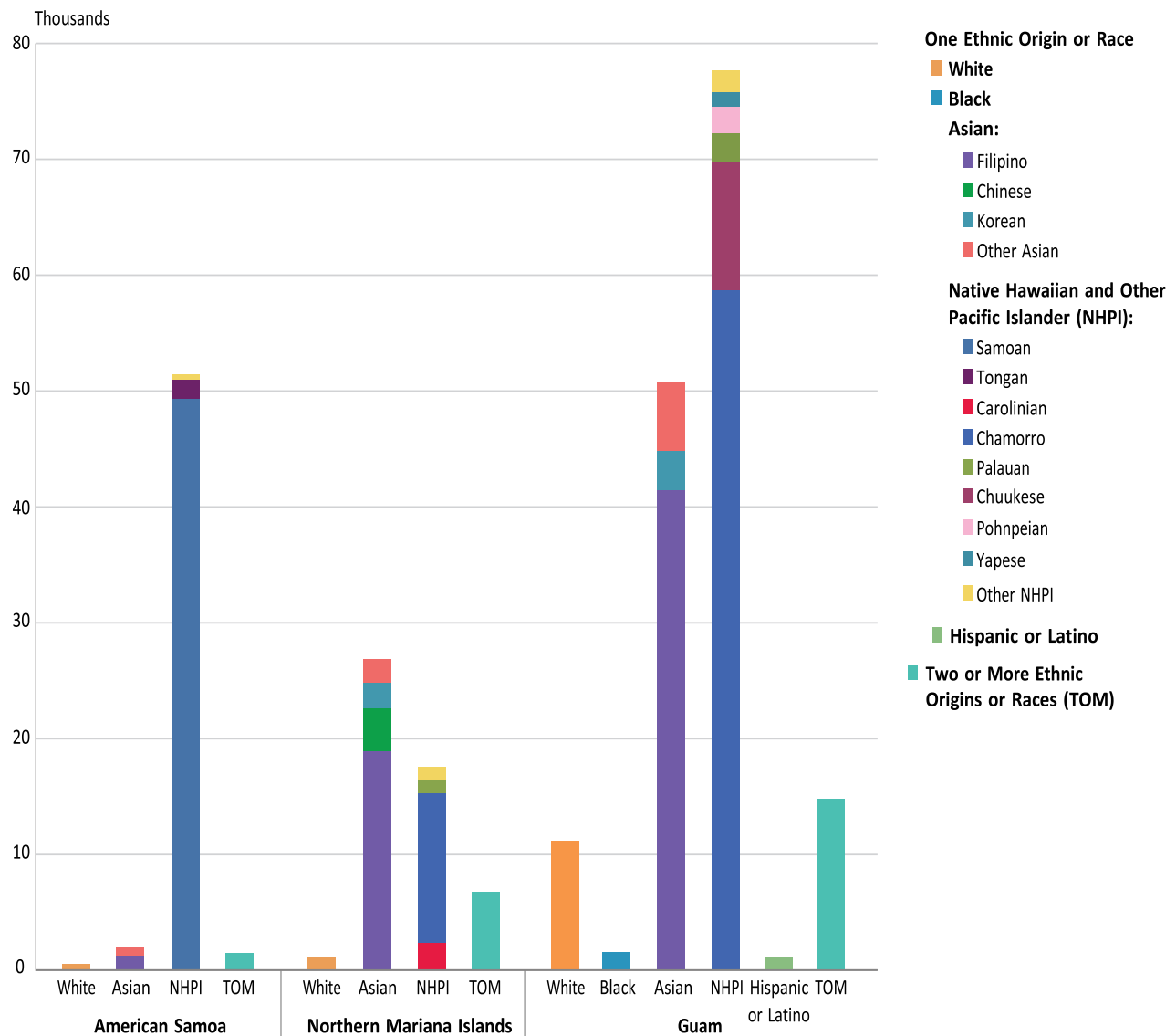
Researchers Foley and Houston recently explored increasing dietetic services by creating more culturally safe interactions with urban Aboriginal and Torres Strait Islander people in Australia¹². After gathering baseline data for their research (2010), the dietitians were allotted time outside the clinic to get more oriented to the nearby

communities which included visiting housing areas and shops. They were introduced to the Elders and other community members. The dietitians became involved in community events in an effort to build relationships. Through their interaction with communities, they learned ways of communicating that were more informal. When the dietitians returned, and provided services at the clinic, they began changing their attire, abandoning the use of lab coats, which they found patients to perceive as “less threatening”. The dietitians conducted consultations in settings more comfortable for patients, such as outside, under trees and in patients’ homes. After these changes were made, the number of new referrals seen increased from 32 visits in 2010 to 191 visits in 2011 ($P<0.001$)¹². The researchers concluded that when “dietetic services are available, affordable, acceptable and appropriate, Aboriginal and Torres Strait Islander people engage with dietetic care and health improvements follow¹².”

The literature suggests that the cultural safety concept is more appropriate and results in better outcomes when working with populations whom have histories of colonialism, and who are Indigenous to the region. Given the population demographics in the USAP region, this research proposes that cultural safety should be considered when working with the populations most at risk for nutrition related NCDs and Indigenous to the region. The proportion of Asian populations in the USAP is significant, and is another group at high risk for nutrition related NCDs^{13,14}. See Figure 1 for demographics of American Samoa, [Commonwealth of the] Northern Mariana Islands and Guam demonstrating the diversity of these locations. The populations identified as Native Hawaiian/Pacific Islanders (Samoan, Tongan, Carolinian, Chamorro, Palauan,

Chuukese, Pohnpeian, Yapese, and other NH/PI) and Asian (Filipino, Chinese, Korean, and other Asian) are significantly higher than the White population.

Figure 1. Population by Race and Ethnic Origin by Island Area for American Samoa, Commonwealth of the Northern Mariana Islands and Guam: 2010 ¹⁵



Note: Race and ethnic origin data for Pacific Islands are collected through one census question. Race and ethnic origin groups of at least 1,000 population are shown. For American Samoa, race and ethnic origin groups of at least 450 population are shown.

Source: U.S. Census Bureau, 2010 Census for American Samoa; 2010 Census for the Commonwealth of the Northern Mariana Islands; 2010 Census for Guam.

Similarly, in the Federated States of Micronesia, the World Factbook 2010 ethnicity data indicate the population identifies as 49.3% Chuukese/Mortlockese; 29.8% Pohnpeian; 6.3% Kosraean; and 5.7% as Yapese ¹⁶. For data specific to the State of Hawai'i, the US census bureau reports 26.7% identify as White; 37.5% as Asian; and 10.0% as NH/PI. The World Factbook estimates for the year 2007, the US demographic data for the country indicate the population identifies as 79.96% White; 12.85% Black; 4.43% Asian; 0.97% as Amerindian/Alaska Native; and 0.18% as Native Hawaiian/Pacific Islander (NH/PI) ¹⁶.

To compare with demographics of RDN practitioners, specifically, the Academy of Nutrition and Dietetics (AND), the world's largest organization of food and nutrition professionals, today, has over 75,000 members who are registered dietitian nutritionists; dietetic technicians, registered; other dietetics professionals holding undergraduate and advanced degrees in nutrition and dietetics; and students. In 2008, a needs assessment was conducted by AND ¹⁷. The needs assessment survey used a stratified sampling approach and included all RDNs, whether currently AND members or not. Out of the probability sample of 12,000, they received a total of 6955 usable responses (a response rate of 58%). Out of the 6955 responses, 5120 were RDNs. Demographic results revealed that out of all RDNs that participated in the survey, 2% were male. In terms of ethnicity and race, 84% identified as White (not Hispanic/Latino), 5% Asian, 2% Black or African American, and 2% "Other" ¹⁷. Although this is valuable information indicating that most RDNs nationwide are White females, the demographics are not specific to the USAP region where the regional demographics of all residents are more diverse than in the contiguous US.

Overall, given the demographics in the USAP region, its history of colonialism and the current high rates of chronic disease; the concept of culturally safe care should be considered when providing health services in the region.

A STORY

The following is a story, from the author's personal perspective and recollection of a patient scenario in an acute care facility in the USAP region. It was this experience, and several others, that sparked the initial interest of this practitioner (and author) to pursue the examination of health care practice in the region.

He had been visiting relatives in Hawai'i, enjoying a variety of meals far away from his home in American Samoa. One night, he developed severe abdominal pain. After passing out in the emergency room, he finally awoke to a cold, sterile room with no windows, a room very different from where he lived back home. He was in the intensive care unit after receiving an exploratory abdominal surgical repair of a perforated bowel. At the time, he had no idea what had happened or why he was there. He felt scared. There were many plastic tubes and noisy beeps and unfamiliar people. He couldn't talk; there was a tube in his throat (an endotracheal [ET] tube). He became completely agitated, unable to communicate or eat. The nurse came in speaking a foreign language, and eventually tied his hand to the bed rail – a common intervention to keep patients from pulling at tubes or getting out of bed. He was a big man and trying to keep him sedated due to his agitation had become quite a challenge. He had already tried several times to pull out his ET tube – the tube that kept him alive as he battled systemic sepsis and peritonitis; complications of the perforated bowel. After several

*days of hoping that family would come and help translate and communicate, I remembered an old textbook that was published by the University of Hawai'i, School of Medicine, "Cross-Cultural Caring: A Handbook for Health Care Professionals in Hawai'i"*¹⁸. *It had a chapter entitled "The Samoans". Besides information specific to the patient's culture which assisted us in understanding his agitation, there were translations of terms that would become helpful such as "Mánává tele" (take a deep breath). Eventually, we could put the patient at ease, speaking to him in his own language, which led to better pain management and a successful extubation, with the patient breathing on his own. As we prepared for his discharge, I worked with the patient to initiate an oral diet for his gastric tolerance and preference. The patient thanked me for holding his hand and assisting in his care throughout his stay. This rapport proved valuable as I continued to work with the patient in an outpatient setting to counsel him on healthier choices during his extended stay in Hawai'i.*

In my career, as a practicing RDN for over 20 years in Hawai'i, I have had cultural competency training and taught cultural competency to my clinical and operational staff. The training tool I used, similar to the handbook we used in the Intensive Care Unit (ICU), divided cultures into separate chapters – with very distinct differences. Each chapter had a quiz – if you passed that quiz, you were considered culturally competent to serve that cultural group of patients. That never made sense to me. A practitioner needs to meet and interact with patients of diverse cultures and, most importantly, receive feedback from these patients on whether the interactions are meaningful, respectful and relevant. That cannot be accomplished by reading a book or mastering some form of training material. I have had wonderful experiences with patients, feeling I

have gained their trust. And, I have had experiences where I was not able to make that connection. In the end, I learned what worked with patients, particularly those of diverse cultures. I never felt the cultural competency training I had was sufficient, and at times, I felt quite offended by it. It felt presumptuous. For example, I never knew where I fit in – being White on the outside and raised with some non-White values. Through my experience, working in Hawai'i, I suspect this is not unusual for many people – whether they are practitioners or patients.

After my experience in the ICU with the Samoan patient, I often wondered, what we could have done differently to ensure safe care from admission for this vulnerable patient within his own cultural context? Did he feel safe?

Over the years of my doctoral studies I have vacillated between the theories cultural relevancy, cultural competency, and cultural safety. As I progressed through my studies, cultural safety seems to be an appropriate theory for health care service providers to incorporate into their practice in the USAP region. Therefore, this dissertation seeks to demonstrate the following:

RESEARCH QUESTION

What are the characteristics of dietetic practice in the Pacific and how do they relate to cultural safety?

SPECIFIC AIMS

Specific Aim #1:

Analyze the Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 member survey, an initial exploration of RDNs in the USAP, to describe the demographics of practicing dietitians and other aspects of their practice.

Specific Aim #2:

Conduct key informant interviews of practicing RDNs in various work settings in the USAP region to collect descriptions of practices that reveal dimensions of culturally safe care.

CHAPTER TWO

A REVIEW OF THE LITERATURE

Introduction

The Uniqueness of the Pacific

“Das why hawd” is a common Pidgin English expression in Hawai‘i. The creation of a new language (Pidgin English) came from the need for several immigrant cultures to communicate with each other, in Hawai‘i, during the plantation era of the late 1800s and early 1900’s. The arrival of immigrant laborers from China, Portugal, Japan, Korea and the Philippines posed a unique opportunity for various cultures to come together in common need to communicate and share food. Just as this new language was emerging, so was the birth of the “plate lunch” – a mixture of food items that was shared by all from the different immigration camps¹⁹. The phrase “das why hawd” expresses the sentiment “why is this so difficult?” To some, particularly newcomers to the region unfamiliar with the unique cultures of the islands, it could be considered difficult to practice dietetics in the USAP region. This author suggests that practicing dietetics in the USAP is not necessarily “difficult”, rather, unique and special with the richness of cultures, abundance in varieties of ethnic foods and loving spirit of its people.

This chapter will review the literature on: 1) Dietetics Practice and NCDs in the USAP, 2) The Theory of Cultural Safety, and 3) Research Methodology. Findings from this literature review will inform the research theories, frameworks and methodologies used to answer the research question and meet the specific aims of this dissertation.

Definitions and Abbreviations

For the purposes of this review, the term USAP includes American Samoa, Commonwealth of the Northern Mariana Islands, the Freely Associated States of Micronesia (including the countries of the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands), Guam, and Hawai'i. This definition is consistent with the Academy of Nutrition and Dietetics' definition of the "Hawai'i region". The abbreviation "MNT" is used for Medical Nutrition Therapy to include nutrition counseling for the purposes of treating a medical condition and the associated symptoms as a means of preventing, delaying the onset of, or treating the disease and related conditions. The abbreviation "RDN" is used for Registered Dietitian Nutritionist, and can be used interchangeably with "RD" (Registered Dietitian), "dietitian" or "nutrition practitioner". The "patient" will refer to anyone receiving nutrition education whether they are a patient, client or recipient (of dietetic services). The abbreviation "NCD(s)" is used for Non-Communicable Disease(s).

Methods

With the intent to capture a wide selection of literature of peer-reviewed articles on "Dietetics Practice and NCDs in the USAP" and "The Theory of Cultural Safety", Google Scholar and PubMed via University of Hawai'i library access were used to conduct the literature review. PubMed was used specifically for review of the literature on research methodology relevant to the specific aims of this research. Articles relating to analysis frameworks (such as Interpretative Phenomenological Analysis), participant surveys

and key informant interviews are included in the findings and discussion of this chapter. This section of the literature search is entitled “Research Methodology”.

Key Search Terms

For “Dietetics Practice and NCDs in the USAP”, key search terms used were: “Dietetics; Pacific; Non-Communicable Diseases; Tools OR Approaches OR Education OR Intervention”. This search yielded 65 articles. For “The Theory of Cultural Safety”, the key search term used was “Cultural Safety” since it is a known theory in the literature. This search yielded 31 articles. For “Research Methods”, with the intent to capture similar studies that have used online survey questionnaires from practitioners and key informant interviews in line with this dissertation’s specific aims and research question; key search terms for quantitative methods were: “Quantitative Methods”; “Survey tools”; “Dietetics”. Key search terms for qualitative methods were: “Qualitative Methods”; “Dietetics”; “Interviews”. This search yielded 38 articles.

Inclusion Criteria

From the key search term results, articles were reviewed by title and abstract to select those that met all inclusion criteria. Articles were included if they met all the following criteria; 1) available in the English language; 2) available in full text; 3) not a review article; 4) less than 10 years old; 5) from peer-reviewed scientific literature; 6) relevant to the research question.

For the “Cultural Safety” key search term results, the inclusion criteria for the year of publication was broadened to include articles from 1988-current to capture articles from

the theory's year of inception. "Formalisation of the concept of cultural safety began in 1988 at a hui in Christchurch, Aotearoa, which was attended by nurse educators and Māori student nurses" ²⁰.

See Table 1 for the final search results. Articles are listed by title, authors, journal and year.

Table 1: Literature Review Articles Describing Dietetics Practice and Non-Communicable Diseases in the Pacific, Cultural Safety, and Research Methodology

Search Topic	Articles selected based on inclusion/exclusion criteria		Journal (year)
	Article title	Authors	
Dietetics Practice and NCDs in the USAP (n=18)	A Community Engagement Process Identifies Environmental Priorities to Prevent Early Childhood Obesity: The Children's Healthy Living (CHL) Program for Remote Underserved Populations in the US Affiliated Pacific Islands, Hawai'i and Alaska	MK Fialkowski, B DeBaryshe, A Bersamin, C Nigg, RL Guerrero, G Rojas, A Areta, A Vargo, T Belyeu-Camacho, R Castro, B Luick, R Novotny, the CHL Team	Maternal and Child Health Journal (2014)
	Pacific Food Guide	M Fialkowski; L Matanane; JW Gibson; E Yiu; J Hollyer; K Kolasa; R Novotny	Nutrition Today (2016)
	An assessment of non-communicable diseases, diabetes, and related risk factors in the Federated States of Micronesia, State of Kosrae: a systems perspective	HM Ichiho; N Tolenoa; L Taulung; M Mongkeya; K Lippwe; N Aitaoto	Hawai'i Journal of Medicine & Public Health (2013)
	Assessing the system of services for chronic diseases prevention and control in the US-affiliated Pacific Islands: introduction and methods	HM Ichiho; N Aitaoto	Hawai'i Journal of Medicine & Public Health (2013)
	Formative Research to Inform Nutrition Interventions in Chuuk and the US Pacific	N Aitaoto; S Campo; LG Snetselaar; K F Janz; KB Farris; E Parker; T Belyeu-Camacho; RP Jimenez	Journal of the Academy of Nutrition and Dietetics (2015)

Search Topic	Articles selected based on inclusion/exclusion criteria		
	Article title	Authors	Journal (year)
Dietetics Practice and NCDs in the USAP	Ethnicity and Diet of Children: Development of Culturally Sensitive Measures	MB Bruss; B Applegate; J Quitugua; RT Palacios; JR Morris	Health Education & Behavior (2007)
	Systematic Review of Prevalence of Young Child Overweight and Obesity in the United States-Affiliated Pacific Region Compared With the 48 Contiguous States: The Children's Healthy Living Program	R Novotny; M Fialkowski; F Li; Y Paulino; D Vargo; R Jim; P Coleman; A Bersamin; CR Nigg; R T Guerrero; J Deenik; J Kim; LR Wilkens	American Journal of Public Health (2014)
	Using the ANGELO Model to Develop the Children's Healthy Living Program Multilevel Intervention to Promote Obesity Preventing Behaviors for Young Children in the US-Affiliated Pacific Region	KL Braun; CR Nigg; MK Fialkowski; J Butel; JR Hollyer; RL Barber; A Bersamin; P Coleman; U Teo-Martin; AM Vargo; R Novotny	Childhood Obesity (2014)
	Developing a Multicultural Nutrition Education Tool: Pacific Island Food Models	NK Baumhofer; N Rothfus; S Yoshimura; ML Quensell; MA Look	Journal of Nutrition Education & Behavior (2014)
	Leveraging Cultural Knowledge to Improve Diet and Health among Affiliated Pacific Islander Populations	KD Cassel, CJ Boushey	Journal of the Academy of Nutrition and Dietetics (2015)
	Patient and provider perspectives on using telemedicine for chronic disease management among Native Hawaiian and Alaska Native people	V Hiratsuka; R Delafield; H Starks; A Ambrose; M Mau	International Journal of Circumpolar Health (2013)
	A descriptive study of Marshallese and Chuukese patients with diabetes in Hawai'i	C Tan; S Haumea; D Juarez; C Grimm	Hawai'i Journal of Medicine & Public Health (2014)

Search Topic	Articles selected based on inclusion/exclusion criteria		
	Article title	Authors	Journal (year)
Dietetics Practice and NCDs in the USAP	Hawai'i foods website: a locally based online nutrition and food-composition resource for healthcare professionals and the public	K Cuthrell; S Yuen; S Murphy; R Novotny; D Au	Hawai'i Medical Journal (2010)
	Insights in public health: Community strengthening through canoe culture: Ho'omana'o Mau as method and metaphor	I Ho-Lastimosa; PW Hwang; B Lastimosa	Hawai'i Journal of Medicine & Public Health (2014)
	Adaptation and Evaluation of the WillTry Tool Among Children in Guam	TF Aflague; RT Guerrero; CJ Boushey	Preventing Chronic Disease (2014)
	Samoa Body and Soul	KD Cassel; K Braun; L Ka'opua; F Soa; C Nigg	Qualitative Health Research (2014)
	Implementing the Obesity Care Model at a Community Health Center in Hawaii to Address Childhood Obesity	M Okihiro; M Pillen; C Ancog; C Inda; V Sehgal	Journal of Health Care for the Poor and Underserved (2013)
	Addressing health disparities by building organizational capacity in the community: a case study of the Wai'anae Coast Comprehensive Health Center	M Okihiro; V Sehgal; T Wilkinson; KA Voloch; R Enos; J O'Brien	Hawaii Journal of Medicine & Public Health (2014)
Cultural Safety (n=20)	Transcending transculturalism? Race, ethnicity and health care	L Culley	Nursing Inquiry (2006)
	Cultural Safety: Exploring the Applicability of the Concept of Cultural Safety to Aboriginal Health and Community Wellness	S Brascoupe'; C Waters	Journal for Aboriginal Health (2009)
	A critique of cultural education in nursing	ME Duffy	Journal of Advanced Nutrition (2001)
	Combating Effects of Racism Through a Cultural Immersion Medical Education Program	P Crampton; A Dowell; C Parkin; C Thompson	Academic Medicine (2003)

Search Topic	Articles selected based on inclusion/exclusion criteria		
	Article title	Authors	Journal (year)
Cultural Safety	Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education	M Tervalon, J Murray-Garcia	Journal of Health Care for the Poor and Underserved (1998)
	Health professionals working with First Nations, Inuit, and Métis consensus guideline	D Wilson; S DLRonde; S Brascoupé; A Apale; L Barney; B Guthrie; E Harrold; O Horn; R Johnson; D Rattray; N Robinson; NA-Kango; G Becker; V Senikas	Journal of Obstetrics and Gynaecology Canada (2013)
	Beyond the Melting Pot and Salad Bowl Views of Cultural Diversity: Advancing Cultural Diversity Education of Nutrition Educators	KT Setiloane	Journal of Nutrition Education and Behavior (2016)
	Cultural safety in nursing education in Aotearoa (New Zealand)	I Ramsden	Nursing praxis in New Zealand (1993)
	Cultural safety in nursing: The New Zealand experience	E Papps; I Ramsden	International Journal for Quality in Health Care (1996)
	Self-Reflection in Multicultural Training: Be Careful What You Ask For	JL Murray-García; S Harrell; JA García; E Gizzi; P Simms-Mackey	Academic Medicine (2005)
	Closing the gap by increasing access to clinical dietetic services for urban Aboriginal and Torres Strait Islander people	W Foley; A Houston	Nutrition & Dietetics (2014)
	Amazingly resilient Indigenous people! Using transformative learning to facilitate positive student engagement with sensitive material	D Jackson; T Power; J Sherwood; L Geia	Contemporary Nurse (2014)
	Rethinking cultural competence	LJ Kirmayer	Transcultural Psychiatry (2012)

Search Topic	Articles selected based on inclusion/exclusion criteria		
	Article title	Authors	Journal (year)
Cultural Safety	Irihapeti Ramsden: The public narrative on cultural safety	S Koptie	First Peoples Child & Family Review (2009)
	Teaching cultural safety in a New Zealand nursing education program	F Richardson; J Carryer	The Journal of Nursing Education. (2005)
	Cultural Safety	I Ramsden	The New Zealand Nursing Journal (2015)
	Cultural safety and the challenges of translating critically oriented knowledge in practice	AJ Browne; C Varcoe; V Smye; S Reimer-Kirkham; JM Lynam; S Wong	Nursing Philosophy (2009)
	Embracing Uncertainty as a Path to Competence: Cultural Safety, Empathy, and Alterity in Clinical Training	LJ Kirmayer	Culture, Medicine and Psychiatry (2013)
	Wellness for all: The possibilities of cultural safety and cultural competence in New Zealand	R DeSouza	Journal of Research in Nursing (2008)
	Community as Teacher Model: Health Profession Students Learn Cultural Safety from an Aboriginal Community	CC Kline; WJ Godolphin; GS Chhina	Michigan Journal of Community Service Learning (2013)
Research Methodology (n=14)	Parents' Perceptions of Child Feeding: A Qualitative Study Based on the Theory of Planned Behavior	K Duncanson; T Burrows; B Holman; C Collins	Journal of Developmental & Behavioral Pediatrics (2013)
	Mentoring as the Segue to Leadership in Dietetics: A Grounded Theory Study	AB Hunter; NM Lewis; PK Ritter-Gooder	Topics in Clinical Nutrition (2012)
	'If you listen to me properly, I feel good': a qualitative examination of patient experiences of dietetic consultations	REE Hancock; G Bonner; R Hollingdale; AM Madden	Journal of Academy of Nutrition and Dietetics (2012)
	The perspectives of obese women receiving antenatal care: A qualitative study of women's experiences	CR Knight-Agarwal; LT Williams; D Davis; R Davey; R Shepherd; A Downing; K Lawson	Women and Birth (2016)

Search Topic	Articles selected based on inclusion/exclusion criteria		
	Article title	Authors	Journal (year)
Research Methodology	Community-Driven Research Agenda to Reduce Health Disparities	PA McElfish; P Kohler; C Smith; S Warmack; B Buron; J Hudson; M Bridges; R Purvis; J Rubon-Chutaro	Clinical and Translational Science (2015)
	Snowball versus Respondent-Driven Sampling	DD Heckathorn	Sociological Methodology (2011)
	An Introduction to Qualitative Research for Food and Nutrition Professionals	JE Harris; PM Gleason; PM Sheean; C Boushey; JA Beto; B Bruemmer	Journal of the American Dietetic Association (2009)
	Writing Interview Protocols and Conducting Interviews: Tips for Students New to the Field of Qualitative Research	SA Jacob; SP Furgerson	The Qualitative Report (2012)
	Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory	H Starks; S Trinidad	Qualitative Health Research (2007)
	Purposive sampling as a tool for informant selection	C Tongco	Ethnobotany Research & Applications (2007)
	Qualitative research in nutrition and dietetics: getting started	JA Swift; V Tischler	Journal of the Academy of Nutrition and Dietetics (2010)
	A Quantitative Assessment of the Cultural Knowledge, Attitudes, and Experiences of Junior and Senior Dietetics Students	LH McArthur; KR Greathouse; ER Smith	Journal of Nutrition Education and Behavior (2011)
	Exploring dietitians' verbal and nonverbal communication skills for effective dietitian–patient communication	RP Cant; RA Aroni	Journal of Human Nutrition and Dietetics (2008)
	A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology	JA Smith	Psychology Journal (2012)

Findings

Dietetics Practice and Non-Communicable Diseases in the US Affiliated Pacific

Scientific literature has contributed to an increasingly detailed description of health and health disparities, particularly in healthcare within the USAP region ^{2,3,21–25}. The magnitude of health issues related to nutrition in the USAP is indeed, of greatest concern. In Ichiho's article, the authors conclude:

“Non-communicable diseases (NCDs), including diabetes, have been identified as an emergency in the US-affiliated Pacific Islands. Some of the highest rates of diabetes and other chronic diseases are experienced by Pacific Islanders. To begin to address this situation, the first step is to identify and describe the burden of chronic diseases and diabetes, describe the programs and agencies responsible for providing the health and medical care to patients, and assess the capacity of the administrative and clinical system of services to provide the infrastructure to address the problems. This report presents the issues and problems that need to be addressed to make a positive impact on the disparities in health caused by NCDs. ³”

In Tan, et al “A Descriptive Study of Marshallese and Chuukese Patients with Diabetes in Hawai'i”, the authors discuss the unique challenges in these populations, including their cultural perception of health ²⁵:

“Information from this study contributes to the limited available data on Micronesian populations, reflecting significant health and socioeconomic

disparities compared to the general United States population. This high-risk population may receive the most benefit from targeted care programs like the Bay Clinic Diabetic Self-Management Education program. Future directions include continued development of such programs and analyses of health indicator outcomes, including morbidity and mortality among those receiving such care compared to those receiving standard diabetes care. Addressing health care challenges unique to this patient population, such as language barriers, physical access to care and differences in cultural perception of health and health care may improve outcomes as well. ²⁵

In another paper, addressing cultural challenges for Samoans living in Hawai'i, the authors share the unique aspects of this culture and what it means to "respect" each other. Potentially, a faith-based, health promotion program may do well in this group, as follows:

"Culturally appropriate approaches should be used to provide dietary counseling to church members. This would include the establishment of gender-specific support groups to promote dietary change, rather than personal interviews used originally... ²⁶

Other articles in this review include recommendations on tools developed specific to the USAP region ²⁷⁻³¹. These tools were designed to be relevant to their target populations in the USAP region. The tools include a website, food models, food guides, and the use of telemedicine for outreach. Aflague, et al, designed a culturally relevant version of a previously validated *WillTry* tool for children in Guam. They found positive results in

assessing the children’s willingness to try fruits and vegetables. Other articles specifically address the prevention of early childhood obesity with approaches for the remote and underserved populations in the USAP ^{32–35} .

In examining culturally relevant MNT resources available to the USAP, there was no literature found specific to the USAP region. Upon further investigation, on a national level, it appears that the desire for more culturally relevant types of resources for nutrition education is highly desirable by RDNs. The Academy of Nutrition and Dietetics (AND) needs assessment evaluated participants expressed desirable needs for considering future membership to AND ¹⁷. Responses were ranked and the following, top five desirable needs for future membership, included (in descending order): reduced membership rates (77%), regional continuing professional education programs (75%), downloadable education materials for purchase (65%), online membership directory (63%) and cultural food/nutrition resource center (62%) – indicating the need for culturally relevant resources on a national level ¹⁷. AND’s website (www.eatright.org) contains links to other organizations that provide nutrition and health education resources in languages other than English. See Table 2 for the resources found on AND’s website.

Table 2: Resources Found on the Academy of Nutrition and Dietetics Website

http://ethnomed.org/patient-education (EthnoMed)	This ethnic medicine website, provided by Harborview Medical Center, contains medical and cultural information about immigrant and refugee groups common to the Seattle area. Handouts are available in
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	a variety of Asian languages; some Spanish versions are available.
http://health.nih.gov/search_results.aspx?terms=Food%2c+Nutrition+and+Metabolism (National Institute of Health)	The National Institutes of Health (NIH) is composed of 27 Institutes and Centers and is the primary Federal agency for conducting and supporting medical research. NIH provides a comprehensive list of handouts on food, nutrition and metabolism topics in many languages that were developed by constituent agencies.
http://nnlm.gov/outreach/consumer/multi.html (National Network of Libraries of Medicine Consumer Health Information in Many Languages Resources)	The National Network of Libraries of Medicine maintains a directory of websites that provide consumer health information in multiple languages as part of the <i>Consumer Health Manual</i> , a collaborative effort of medical librarians and consumer health librarians at public libraries.
http://health.utah.gov/disparities/multilinguallibrary (Utah Department of Health Office of Health Disparities)	The Utah Department of Health's Center for Multicultural Health provides health education materials in many languages to assist health professionals in communicating with people who do not speak English or have a low English proficiency.

Although quite informational, these references were not found to be particularly relevant to the USAP Region. Besides these websites, AND offers nutrition education materials in English with a small collection translated into Spanish.

For purposes of this doctoral research, further attention on the methods of nutrition education material translation and health message communication will occur.

Translating materials from English into another language - materials that were originally developed in English from a Western perspective with Western worldviews, values and

belief systems - does not make it culturally relevant nor necessarily appropriate. Too often, health messages and materials to communicate health messages are simply translated from English to another language without considering the relatability to a target audience. The translation is driven by the desire to be more culturally sensitive and/or the expectation to meet certain organizational standards (such as hospital policies and procedures) and regulated standards (such as “The Joint Commission” [TJC] standards for cultural competency) where the focus of these standards is on the practitioner^{36,37}. In an effort to meet practice standards, such as TJC, practitioners potentially focus on themselves as the standards are written with the ultimate goal of practitioner competencies. These competencies can be compared to other quantitative types of assessments such as pre- and post-exams, Medical College Admission Tests (MCATs), Board Certification exams and the like. Practitioners may lose sight of the intent of these standards – which is to provide care that is culturally relevant to the populations they serve^{36,37}. These standards don’t include measurements of cultural relevance from the patients’ perspective other than what becomes apparent through patient complaints or “adverse events” and patient satisfaction surveys – also reflective of more quantitative types of assessments. This is where cultural competency falls short.

Qualitative approaches are gaining interest in Indigenous health studies as they allow for story-telling, focus groups and interviews to capture experiences, as described and experienced by the patient or recipient of health care services. Qualitative research can be more time-intensive and more difficult to analyze with scientific rigor. This may be a reason why these types of studies are rarer in health care research. It’s much quicker

and practical to collect data on survey results or count the number of “adverse events” in a health care setting. In health care, there is growing interest in addressing culturally safe care through patient rights. Patients have the right to feel safe in their care²⁰. This leads to the question: does that safety extend to cultural safety?

One article provides a unique approach using the “canoe culture” as a method and metaphor for public health strategies in the USAP region³⁸. Canoe paddling has historical significance in the Pacific. The Indigenous people were navigators by way of sailing canoes, navigating by the stars. Through their travels, they found connection with other similar cultures, sharing their resources such as crops and cooking methods. The “canoe culture” approach has proven to be a relevant and meaningful approach to empowering Native Hawaiian communities. Through the use of the wa‘a (canoe) and pre-colonial Hawaiian practices, such as fishing, the Native Hawaiians establish a solid foundation of independence and self-sustainability. The community, feeling empowered, works together to overcome adverse circumstances such as health disparities. Through this metaphorical value of paddling, the canoe and community empowerment, health messages can be relayed with relevance and within the target audiences’ cultural context of values and belief systems³⁸.

Cultural Safety

The concept of cultural safety was generated out of a colonial context in Aotearoa in the early 1990’s. It was in response to the poor health status of Māori, the Indigenous Peoples of Aotearoa. The Māori communities insisted that health care delivery change. Much like cultural competency where the intent is to provide care that is culturally

sensitive and relevant, cultural safety was developed to address health disparities in culturally diverse populations. The difference is cultural safety was developed with the idea that, to provide quality care for people from different ethnicities and cultures, practitioners must provide that care within the cultural values and norms of the patient¹¹. Māori nurses began a process of self-examination to change nursing education, thus introducing the concept of cultural safety^{10,20,39-41}. Cultural safety was founded on the premise of the injustices of historical trauma, colonization, forced assimilation (such as the residential schools in Canada⁴²) and power structures created by dominant cultures not Indigenous to the region. Cultural safety focuses on transforming the delivery of health care initiated through changes in thinking about power relationships and patients' rights²⁰. The skill of the health care practitioner does not lie in knowing the customs and value systems of ethno-specific cultures, rather cultural safety places the obligation on the practitioner to provide care within a framework of recognizing and respecting the difference of any individual²⁰. Since the early 1990's there has been much debate on the definition of cultural safety and its applicability to health care services^{11,44-48}. The majority of the literature comes from regions in Aotearoa^{10,20,39-41,43,48}, Australia^{12,48} and Canada^{11,42,44,49-53}.

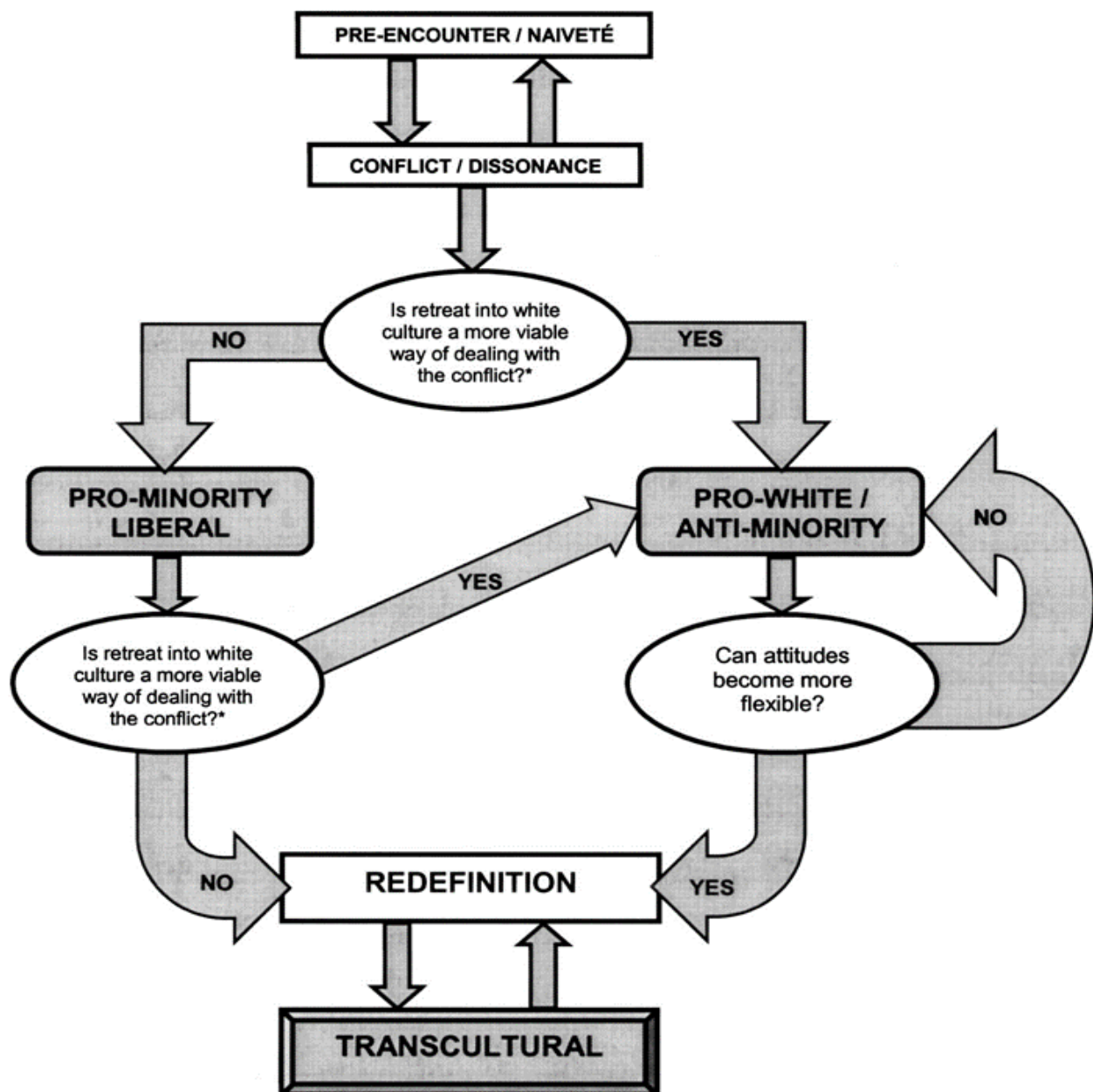
In the article "Cultural Safety", Brascoupé writes, "the introduction of the concept of cultural safety to the debate on cross-cultural health care was significant. It questioned and challenged the concept of cultural competency by bringing in the notion of safety. It extended the debate by focusing less on the benefits of cross-cultural awareness and sensitivity, and more on the risks associated with their absence" ¹¹.

The concept of cultural competency, common in Western health care systems, is similar to cultural safety in that the practitioner is expected to have cultural sensitivity when caring for patients of diverse ethnicities. The difference is the practitioner determines whether they are competent, whereas with cultural safety the patient determines if the healthcare experience was culturally safe. Dr. Kirmayer suggests that cultural competency models need to be critically assessed and re-thought to identify alternatives that may better fit the needs of patients and health care providers working in specific health care settings across the nations, regions and communities^{54,55}. He goes on to suggest health care services need to be more accessible, acceptable and effective for people from diverse ethno-cultural communities^{54,55}. “Access” to care is not defined by physical access alone, rather, access to care includes care that a community considers “accessible” because it is feels safe, helpful and relevant to their needs.

The challenge with cultural safety, and perhaps hesitation, is the need for self-reflection. Several articles discuss the importance of self-reflection for practitioners as the first step towards culturally safe care^{11,47,54–58}. The article entitled “Self-Reflection in Multicultural Training: Be Careful What You Ask For”⁵⁶ is written by four physicians and focuses on physician training to minimize personal bias in health care. Dr. Murray-Garcia and colleagues provide several case studies where this type of training and self-reflection proves to be challenging and could be quite uncomfortable for practitioners. As depicted in the first case study, there is a process (not necessarily linear) where resistance and backlash are expected, especially in the “conflict or dissonance” stage of learning . A vulnerability (or naiveté) and discomfort occurs when “self-assessing” for the potential to be biased or stereotypically categorizing groups of people⁵⁶. The following figure depicts

this process, as described by Murray-Garcia, et al, through the adaptation of a White racial identity development framework (originally created by Sabnani H, Ponterotto J, et al. “White racial identity development and cross-cultural counselor training: a stage model”)^{56,58}.

Figure 2: White Racial Identity Development Framework (adapted) ^{56,58}



This framework, as depicted in Figure 2, indicates the complexity and difficulty practitioners may experience as they strive to self-reflect and acknowledge their own tendencies towards “White Culture”. This is plausible whether White culture is within their own culture or whether it is that which to they have become acclimated in their life experiences.

In “Cultural Humility Versus Cultural Competence: A Critical Distinction in Defining Physician Training Outcomes in Multicultural Education”, Drs. Tervalon and Murray-Garcia propose that cultural humility is a more suitable goal incorporating a life-long commitment to self-evaluation (or self-reflection) to redress the power imbalances in the patient-physician dynamic⁵⁷. The authors suggest that:

“It is imperative that there be a simultaneous process of self-reflection (realistic and ongoing self-appraisal) and commitment to a lifelong learning process. In this way, trainees are ideally flexible and humble enough to let go of the false sense of security that stereotyping brings. They are flexible and humble enough to assess anew the cultural dimensions of the experiences of each patient. And finally, they are flexible and humble enough to say that they do not know when they truly do not know and to search for and access resources that might enhance immeasurably the care of the patient as well as their future clinical practice⁵⁷.”

Cultural safety is being used as a framework in the training of health care practitioners outside of the US, as evident in Canada. The San'yas Indigenous Cultural Safety Training Program was developed by the Provincial Health Services Authority

(PHSA) Aboriginal Health Program. The training was created in response to the Transformative Change Accord First Nations Health Plan requirement to increase cultural competency within Health Authorities through Action Item 19: First Nations and the Province will develop a curriculum for cultural competency for health authorities⁵⁹.

For the purposes of this research, a study conducted in Australia to improve dietetic services is highlighted as an example of cultural safety in dietetics practice. Dr. Foley describes improved patient experiences after implementing culturally safe practices into a Brisbane Indigenous health clinic providing services to Aboriginal and Torres Strait Islanders. New dietitian referrals more than doubled and occasions of dietetics service tripled¹². The dietitians accomplished this through improving cultural awareness and building trust with the Indigenous community members by changing their communication styles and settings for dietitian services – such as sitting outside with patients instead of inside a cold, sterile clinic¹².

Research Methodology

Specific Aim #1: Analyze the Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 member survey, an initial exploration of RDNs in the USAP, to describe the demographics of practicing dietitians and other aspects of their practice.

Relevant to Specific Aim #1, survey protocols, and methods for data analysis were reviewed. McArthur et al examined cultural competence of dietetics majors by gathering data from a known dietetics program. The development of their survey tool included pre-testing of the survey tool with a sample of the student population. 283 students were given a self-administered questionnaire to assess the cultural competence of the

dietetic majors. Knowledge was measured using a multiple-choice test, attitudes were assessed using scales, and experiences were measured using a list of activities.

Descriptive statistics were generated on all variables of the survey results⁶⁰.

In Australia, Cant et al, also provide guidance on conducting a survey with quantitative analysis using descriptive statistics⁶¹. Australian dietitians were given a survey, collecting data on needs, demographic characteristics, educational strategies, communication skills and professional attributes as part of a mixed method approach to examine effectiveness of dietitian-patient communication. The results were reported in table format with counts and percentages⁶¹.

Specific Aim #2: Conduct key informant interviews of practicing RDNs in various work settings in the USAP region to collect descriptions of practices that reveal dimensions of culturally safe care.

Relevant to Specific Aim #2, considering this aim is driven by a pre-determined theoretical framework of cultural safety, hypothesized to be existing in the USAP region, the method of analysis most appropriate would be interpretative phenomenological analysis theory since we are looking at a unique situation – the phenomenon of practicing dietetics in the USAP region^{66–72}.

In Starks, et al, the underlying philosophy of this theory is that there is a known, existing perceived reality with common features of an experience. The goal of phenomenology is to describe the meaning of the lived experience of such a phenomenon. The participants of this type of research are those who have experienced the phenomenon of interest. Interview strategies surround participants describing their experiences as the

interviewer probes for detail and clarity. Analytical methods seek to identify descriptions of the phenomenon; cluster into discrete categories; taken together, these describe the “essence” of core commonality and structure of the experience. Typically, the audience of such research literature is clinicians, practitioners and others who need to understand the lived experience of the phenomenon of interest⁷⁰.

In the selection of key informants for interviewing, several studies inform the use of snowball technique and purposive sampling⁶²⁻⁶⁴. The design of qualitative research studies using interview protocols and questions are found in several articles⁶⁴⁻⁶⁶. In Duncanson, et al, researchers aim to examine child-feeding behaviors and attitudes of parents and children within the theory of a planned behavior framework. Interview questions used for data collection were grouped into predefined categories, with each relating to an element of the theory being studied. Coding of the interview transcriptions was accomplished by grouping the data into themes based on the theoretical framework. A descriptive summary of each resulting theme was then collated into a table, with supporting quotes added to provide context and evidence for the theme⁶⁴. Others articles validate this approach to the interview, coding and analysis methodology of the key informant interviews to meet the specific aim of this study⁶⁸⁻⁷⁰.

Discussion

This literature review describes the urgent need to address NCDs in the USAP region through appropriate, culturally relevant approaches – such as understanding cultural perceptions of health and the need for respectful interactions. Although some nutrition resource tools have been developed specific to the USAP region, at a national level,

RDNs still need culturally relevant nutrition resources. Identification of such needs within the USAP region has not been systematically studied.

In health care, organizational and regulatory standards use cultural competency as the standard of care when working with diverse populations. The assessment of whether a practitioner is culturally competent is largely quantitative and practitioner-focused.

Assessing the acceptance and quality of health care interventions from the patient's perspective is loosely accomplished through patient satisfaction surveys and "adverse event" reporting. Qualitative research, particularly community-based participatory research, is found to be beneficial when working with Indigenous groups such as Native Hawaiians³⁸. Incorporating traditional practices thereby empowering the Native Hawaiian community has proven successful in addressing such circumstances as health disparities.

In other parts of the world, cultural safety is a standard of care and standard for training for all practitioners – such as the San'yas training in Canada⁵⁹. In exploring the use of cultural safety in the practice of dietetics, the study conducted by Foley et al resulted in improved dietetics services in an Australian health clinic¹². This review demonstrates the need for a description and examination of dietetics practice in the USAP region.

Examining the experiences of practice given the cultural diversity in the region will inform the evident phenomenon of cultural safety as experienced by practicing RDNs. Considering this literature review, the research question and specific aims, the following research is described.

For methodology of Specific Aim #1 (Analyze the Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 member survey, an initial exploration of RDNs in the USAP, to describe the demographics of practicing dietitians and other aspects of their practice); the use of descriptive statistics (counts and percentages) of data collected on demographics and dietetics practice provides a first step in understanding the specific needs and potentiality for culturally relevant nutrition education tools and resources.

The results of the RDN survey within the USAP region informs further work in the development of culturally relevant tools to enhance the practice of RDNs and to improve the nutritional health of people in the USAP region. This study contributes to new knowledge about the use of nutrition websites and food composition databases by RDNs for improving the health of the populations they serve.

Participation in this study involves the completion of an anonymous on-line (Internet) survey. Data collection includes:

1. Demographics (RDNs and the patient/clients they serve)
2. MNT nutrition education topic-specific materials needed (for example, diabetes, obesity, renal, and hypertension)
3. Culturally relevant tools needed (specific to individual ethnic groups served)
4. Information about access and use of the internet as a nutrition resource (RDNS and patients)

The results of this study will be shared with the participants of the survey and other practitioners interested in learning more about improving their practices with their culturally diverse patients, particularly Indigenous cultures. Based on the results, nutrition professionals will have the knowledge of their specific needs and could begin

creating and disseminating specific nutrition education tools, approaches, techniques in a collective manner to all RDNs practicing in the USAP region. Evaluation of use, acceptance and effectiveness of new materials should be considered and shared. Given the challenge of the geography of the USAP region and mixture of cultures in each area, a website to house all materials developed could facilitate sharing of these materials and tools.

For methodology of Specific Aim #2 (Conduct key informant interviews of practicing RDNs in various work settings in the USAP region to collect descriptions of practices that reveal dimensions of culturally safe care); snowball technique with purposive sampling will inform the selection of the key informant interviewee pool. Analysis of key informant interviews is guided by Interpretative Phenomenological Analysis.

Considering the regional histories of migration, colonization and potential loss of cultural identities, the theory of cultural safety, informs the interview questions, and analysis framework of the findings.

Conclusion

The RDNs' work tends to encompass many aspects of food, from what we eat to how we eat, under what circumstances we eat, and ultimately, how our diets affect our health. RDNs need to understand all aspects of food and dietary choices to effectively influence patients and clients. Having knowledge, understanding and respect for a patient's culture can go a long way toward gaining trust in the interactions between patients and the RDN, which improves nutrition counseling, which in turn, will increase the chances of improving treatment outcomes⁷⁵⁻⁷⁷.

The practice of nutrition and therapeutic diet counseling in the USAP populations can be challenging since there is a wide diversity of cultural and dietary practices. Even within one culture, one sees variation in eating habits, cooking techniques, food storage and beliefs about food and health. The concepts of cultural diversity and cultural competency have been actively researched and written about for several decades, particularly, in the Western health care setting. The questions become: How does one provide culturally relevant care for people in the USAP region? Is cultural competency sufficient? And, is cultural safety already evident in the practice of dietetics in the USAP region?

Practicing dietetics in the USAP region doesn't have to be "hard", we just need to:

Ho'olohe ke pepeiao nana i kā maka hana ka lima

*Listen carefully. Observe with eyes, and work with the hands*⁷⁸.

CHAPTER THREE

DIETETICS PRACTICE IN THE UNIQUE, CULTURALLY DIVERSE PACIFIC REGION

(This manuscript will be submitted for publication to the Rural and Remote Health)

Abstract

Background. In the US Affiliated Pacific (USAP) region, rates of chronic disease are high, particularly in populations identified as Pacific Islander. The practice of dietetics includes nutrition education for the prevention and treatment of chronic diseases.

Culturally relevant care is important in dietetics practice, particularly given the cultural milieu in the USAP region.

Objective. To describe the dietetics practice, the populations served, and needs for resources by topic and cultural relevance for Registered Dietitian Nutritionists (RDNs) in the USAP Region.

Methods. An online survey was distributed to all members of the Hawai'i Affiliate of the American Academy of Nutrition and Dietetics (HAND) in 2014 (includes members from Hawai'i and the US Affiliated Pacific region).

Participants/setting. Members of HAND who were practicing RDNs in the USAP region.

Results. The online survey yielded 104 usable responses. Most participants were female and lived and worked in Hawai'i. One-third of practicing RDNs saw >100 patients or clients per month. Most prevalent populations served were identified as Asian and Pacific Islanders. RDNs ranked highest needs for resources as those relevant to Asian

and Pacific Islander populations and addressing topics of weight control and diabetes education.

Conclusions. Dietetics practice in the USAP region is unique given the prevalence of Asians and Pacific Islanders served by RDNs. RDNs are charged with providing culturally relevant care to populations, such as Pacific Islanders, with histories of colonization, historical trauma, nutrition transition, and chronic disease patterns. Findings will inform the development of new, culturally appropriate resources, to enhance dietetics practice in the USAP region.

Introduction

The “practice of dietetics” is defined by the Academy of Nutrition and Dietetics (AND) as “[Registered Dietitian Nutritionists] RDNs [whom] provide medical nutrition therapy, nutrition education and counseling, care coordination and management to address prevention and treatment of one or more acute or chronic conditions⁷⁹.” Practicing dietetics in the USAP proves challenging with the high prevalence of nutrition related chronic diseases such as obesity, diabetes, cardiovascular disease and hypertension, particularly in Indigenous, Pacific Island populations^{2,3}.

The Pacific region is vast, with over 1000 islands and atolls in the Pacific Ocean, creating some of the most isolated communities in the world. For thousands of years, the Pacific was a region of healthy, self-sustaining, food-sovereign, hard-working, Indigenous communities. As navigators and explorers, Indigenous people migrated, sharing food crops, fishing and farming techniques, and ways of cooking and storing food. Hughes and Marks describe these Pacific Island communities as “...wide social

networks and subsistence livelihoods that made the Pacific view of food and land very different...social networks and land were more important for determining identity and traditional ties than for providing food...health was a group concept - a shared sense of well-being⁴".

Starting in the 1500's, colonization in the USAP region led to significant and irreversible changes for all indigenous ways of life. Traditional cultures and their sovereign food systems were replaced by new foods and cooking methods, influenced by foreign trade and food aid⁴. A region, once free of processed foods, adopted a dependency on easy-to-get, high fat, high sugar imported foods⁴. Thus, the people of the USAP region experience high rates of chronic diseases, such as diabetes, hypertension, obesity and cardiovascular diseases. On May 4, 2010, The Pacific Islands Health Officers Association declared "...a regional state of health emergency due to the epidemic of non-communicable diseases in the United States-Affiliated Pacific Islands"⁸⁰. This declaration suggests a sense of urgency for all healthcare workers to rethink and ramp up their services and address health disparities in this region.

Given the high rates of chronic (non-communicable) disease and the cultural milieu in the USAP, it is imperative that the practice of dietetics be culturally appropriate and relevant to the populations served. Cultural competency is a well-known concept integrated into the standard of care in Western healthcare systems. The National Institutes of Health (NIH) recognizes that "cultural competency is critical to reducing health disparities [including chronic diseases] and improving access to high quality health care; health care that is respectful of and responsive to the needs of diverse patients"⁹. Culturally competent dietetics practice is defined by AND as nutrition

counseling and intervention skills relevant to each population served. It demonstrates knowledge and sensitivity to a population's history, culture and food systems⁸.

With a heightened need in the USAP region to address the chronic disease epidemic, RDNs are charged with providing effective nutrition services in the USAP region that are culturally sensitive and relevant. To provide culturally appropriate care, RDNs must have the necessary tools and resources to practice in this region. Evaluating the needs for relevant resources in this region would be beneficial in identifying existing as well as potential gaps in nutrition related resources.

The "Compensation and Benefits Survey of the Dietetics Profession" which is conducted every other year by AND, most recently in 2015, provides rich data on the practice of dietetics. Practitioner demographics and areas of practice are divided by nine geographic regions⁸¹. AND defines the "Pacific Region" to include California, Oregon, Washington, Alaska, and Hawai'i, and thus does not yield data specific to the US Pacific (Islands) region. Of the 5229 respondents currently working as dietetics practitioners, 727 (14%) were from the AND defined Pacific Region. From the total usable AND survey responses, including those not currently working as practitioners (N=6385), nine respondents self-identified as "Native Hawaiian/Pacific Islander", of which six were RDNs⁸¹. However, given the small number of RDNs (n=390) in the US Pacific (Islands) region⁸², most AND survey respondents are more likely from the 'Pacific Region' states on the contiguous US. In addition, the AND survey does not inquire about practitioner needs for resources. This led the Hawai'i Academy of Nutrition and Dietetics (HAND) to conduct a region-specific survey of its members in December 2013 through January 2014.

This study uses the HAND 2014 member survey results to describe RDN practice, the populations that they serve, and the needs for topic- and race/ethnic-specific resources. Findings will inform opportunities to enhance dietetics practice in the USAP region, such as the development of new, culturally relevant resources.

Materials and Methods

HAND is a non-profit voluntary professional organization with 280 members and an affiliate of AND⁸³. Members of HAND are RDNs, Dietetic Technicians-Registered (DTRs), dietetic interns, students and other nutrition professionals (non-RDNs) that typically live and work in Hawai'i and in the US Affiliated Pacific Islands (American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Republic of Palau, and the Republic of the Marshall Islands)⁸³. The criteria for HAND membership is payment of AND annual dues (approximately \$300.00/year) and intention to select the "Hawai'i Region" as their local affiliate organization.

For purposes of this study, the US Affiliated Pacific (USAP) is defined as the Pacific Island locations with US affiliation: American Samoa, Commonwealth of the Northern Mariana Islands, the Freely Associated States of Micronesia (including the countries of the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands), Guam, and Hawai'i.

In December 2013, a partnership was formed between HAND and the Hawai'i Foods Website Project, which provides nutrition information relevant to the foods in the region to the people of Hawai'i³¹. The Hawai'i Foods Website project sought to identify needs

for new and culturally relevant resources. HAND board members were interested in collecting data on members, specific to the USAP region. In partnership with HAND, the Hawai'i Foods Website Project created the "Hawai'i Foods Survey". For purposes of this paper, the survey will be referred to as the "HAND 2014 Survey". This survey collected demographic data of HAND members and the populations that they served in the USAP region. HAND members were asked about their needs for race/ethnic specific and/or topic specific resources – relevant to the populations that they served.

The HAND 2014 survey instrument contained 31 questions, and was developed under the advisement of the HAND Board of Directors and the Hawai'i Foods Website Advisory Committee. The 2013 AND Compensation and Benefits Survey of the Dietetics Profession Survey also informed the development of the HAND 2014 survey⁸⁴.

Additional questions specific to populations served in the USAP region were adapted from the Hawai'i Behavioral Risk Factor Surveillance System⁸⁴. The HAND board members and other practicing RDNs in the region were invited to participate in the pretesting of the survey tool. 36 RDNs participated in the pretesting. Pretesting indicated that the questions were clear and interpreted correctly.

The HAND Board of Directors approved the use of the HAND membership email list to solicit survey participants. The membership email list was obtained through the Academy's Data Management Information System (DMIS) available to the board in managing identification and contact information of their members. The HAND Affiliate President sent an email to all HAND members using the HAND master email list. The email briefly explained the survey and provided a link to the online survey using SurveyMonkey®. During the study period of December 1, 2013- January 30, 2014,

three reminder emails were sent to solicit additional responses from those that had not yet responded. Although, it is unclear in whether the member contacted was the member that responded to the survey, more than half of the response pool, 72 respondents (68%), responded to the sender of the email, thanking them for the opportunity.

Respondents consented to participating after reading the informational email, clicking on the URL, and answering “yes” to the first question: “Do you consent to participate in the Hawai’i Academy of Nutrition and Dietetics (HAND) 2014 Survey?” Once the survey continued there was an option for respondents to opt out at any time. Respondents were encouraged to call or email with any questions regarding the clarity of the survey. There were no questions from any of the respondents.

Response rate was considered high at 35%, in comparison to HAND membership response rates of yearly leadership elections as 11.6% (2016); and 13% (2015).

An exemption was obtained from the Office of Research Compliance Human Studies Program at the, [BLINDED UNIVERSITY].

After the close of the survey, in January 2014, data was extrapolated from the SurveyMonkey® tool into Microsoft Excel 2010®. Once the data was extrapolated, it was deleted from the SurveyMonkey® tool and saved on a password protected computer. The sample size was too small to find any significance using Chi-Square testing, therefore, descriptive analysis (counts and percentages) was conducted on those HAND members (convenience sample) who responded to the survey. For analysis purposes, race/ethnicity of the populations served from the HAND 2014 survey

will be categorized as follows: 1) “Pacific Islanders” which includes all Indigenous groups within the USAP region to include “Samoan”, “Native Hawaiian”, and “Micronesian”; 2) “Asian” includes groups identified as “Filipino”, “Japanese”, “Chinese”, “Vietnamese” and “Korean”; and 3) “White” includes individuals identified as “Caucasian”. See Appendix A for the original survey, including the original race/ethnic categories used to define the populations served by RDNs.

For the purposes of this study, data from questions #1-21 will be examined. Questions #22-31 are not pertinent to this study. See Appendix A for original survey.

Results

Characteristics of RDNs in the USAP Region

The HAND 2014 member survey yielded 106 responses (35% response rate). Two respondents lived and practiced outside of the USAP region and therefore, were excluded. Most were female and had one or more years of work experience in the nutrition field. Out of those currently working, more RDNs worked in Hospital/Acute Care and Outpatient Care or Ambulatory Care (such as dialysis clinics). One third of those currently working saw over 100 patients, monthly. The majority saw patients on a one-to-one basis and in-person. Most practitioners had access and utilized the internet to gather nutrition information and other practice resources for work. For further details see Table 3.

Table 3. Characteristics of Respondents to the Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey (n=104)

Survey Item	Response Category	n (%)
Sex	Female	101 (97%)
	Male	3 (3%)
County of residence	Honolulu	78 (75%)
	Hawai'i	12 (12%)
	Maui	5 (5%)
	Kaua'i	3 (3%)
	Outside Hawai'i (American Samoa-2, Guam-4)	6 (6%)
Member of HAND ^a	Yes	101 (97%)
	No	3 (3%)
Professional status	Registered Dietitian Nutritionist (RDN)	92 (88%)
	Student	5 (5%)
	Other	7 (7%)
Work experience in the field	0 to < 1 year	10 (10%)
	1 or more years	94 (90%)
Currently working in nutrition field	Yes	88 (85%)
	No (defaulted to non-practice related questions)	16 (15%)
Work setting ^b	College/University/Teaching Facility	11 (13%)
	Community or Public Health Program	5 (6%)
	Contract Food Management Company	1 (1%)
	Government Agency or Department	12 (14%)
	Hospital/Acute Care	21 (24%)
	Long Term Care/Extended Care/Assisted Living	12 (14%)
	Non-Profit Agency/Organization	2 (2%)
	Out-patient or Ambulatory Care	19 (22%)
	Private Practice	3 (3%)
Provides direct services ^b	Yes	69 (80%)
	No	17 (20%)

Footnotes:

a. The HAND master email list used to solicit survey participation may have included non-members

b. n=86, 2 skipped question. Percentages may not add up to 100% due to rounding.

Populations Served

Populations (clients and/or patients) served most frequently were identified as Asian, followed by Pacific Islanders, and then White (see Table 4). Ages ranged from birth to seniors (>60 years) with adults (18-59 years) being the most prevalent group served. Clients and/or patients lived throughout the USAP region, including American Samoa, Guam, Hawai'i and Saipan. Many had access to the internet for nutrition information.

Needs for Nutrition Resources

When practitioners were asked about the level of need for more race/ethnic-specific nutrition resources, the highest resource needs were identified for Asians, followed by Pacific Islanders (See Table 5). Nutrition topics ranking the highest level of need were weight control, diabetes, low sodium, followed by low fat/low cholesterol, renal, nutrition in the aging/elderly and fiber (high or low) diets, respectively. Practitioners ranked level of needs for modes of nutrition resources with printable fact sheets (Portable Document Format or PDFs) and recipes being most desirable.

Table 4. Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey RDN Respondents Description of the Populations Served in the Pacific Region (n=62)^a

Survey Item	Response Category	n (%)
Number of clients/patients served on a monthly basis ^b	0-10	3 (5%)
	11-25	8 (13%)
	26-50	14 (23%)
	51-100	15 (25%)
	>100	21 (34%)
Areas that typical clients/patients live ^c	Oahu City of Honolulu	39 (63%)
	Windward	25 (40%)
	Central	26 (42%)
	Leeward	24 (39%)
	West	20 (32%)
	North	15 (24%)
	Hawai'i Island	14 (23%)
	Kaua'i	9 (14%)
	Maui, Moloka'i, Lāna'i	17 (27%)
	Outside Hawai'i (Pacific Region-4, Guam-3, Samoa-2)	9 (14%)
Age groups served ^c	Children (0-12 years)	29 (47%)
	Teens (13-17 years)	32 (52%)
	Adults (18-59 years)	58 (94%)
	Seniors (> 60 years)	51 (82%)
Top three ethnic groups that best describe clients/patients served most often ^d	<u>Asian</u>	
	Filipino	39 (63%)
	Japanese	31 (50%)
	Other Asian	12 (19%)
	<u>Pacific Islanders</u>	
	Native Hawaiian	30 (48%)
	Micronesian	12 (19%)
	Samoan	8 (13%)
	<u>White</u> (Caucasian)	22 (35%)
	<u>Other</u>	10 (16%)

Footnotes:

a. Out of 65 respondents who identified as currently practicing and providing direct services, 3 did not respond to these questions. Percentages are based on total responses for each question.

b. 1 skipped this question.

c. Respondents instructed to select "all that apply".

d. Respondents ranked top 3 only.

Table 4. (cont.) Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey
RDN Respondents Description of the Populations Served in the Pacific Region
(n=62)^a

Survey Item	Response Category	Frequency	n (%)
Modes of communication used with clients/patients	In-person	Always/Sometimes	62 (100%)
		Rarely/Never	0 (0%)
	Telephone/text	Always/Sometimes	43 (69%)
		Rarely/Never	19 (31%)
	Internet	Always/Sometimes	29 (47%)
		Rarely/Never	33 (53%)
	Postal mail	Always/Sometimes	15 (24%)
		Rarely/Never	47 (76%)
Services provided in following settings	One-on-One	Always/Sometimes	57 (92%)
		Rarely/Never	5 (8%)
	Small Groups (≤ 10)	Always/Sometimes	39 (63%)
		Rarely/Never	23 (37%)
	Large Groups (>10)	Always/Sometimes	28 (45%)
		Rarely/Never	34 (55%)

Footnote:

- a. Out of 65 respondents who identified as currently practicing and providing direct services, 3 did not respond to these questions. Percentages are based on total responses for each question.

Table 5. Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey RDN Respondents' Identified Needs for Practicing in the Pacific Region (n=62)^a

Survey Item	Response Category	Level of Need	n (%)
Level of need for more culturally relevant nutrition resources ranked by race/ethnicity category	<u>Asian</u>		
	Filipino	High/Moderate	51 (82%)
		Low/Don't Know/No Answer	11 (18%)
	Japanese	High/Moderate	38 (62%)
		Low/Don't Know/No Answer	24 (38%)
	<u>Pacific Islanders</u>		
	Native Hawaiian	High/Moderate	41 (66%)
		Low/Don't Know/No Answer	21 (34%)
	Micronesian	High/Moderate	45 (73%)
		Low/Don't Know/No Answer	17 (27%)
	Samoan	High/Moderate	43 (70%)
		Low/Don't Know/No Answer	19 (30%)
	<u>White</u>		
	Caucasian	High/Moderate	15 (24%)
		Low/Don't Know/No Answer	47 (76%)
Level of need for more nutrition resources ranked by nutrition education topic	Pregnancy & Nutrition	High/Moderate	29 (47%)
		Low/Don't Know/No Answer	33 (53%)
	Infant/Toddler Nutrition	High/Moderate	29 (47%)
		Low/Don't Know/No Answer	33 (53%)
	Childhood Nutrition	High/Moderate	33 (53%)
		Low/Don't Know/No Answer	29 (47%)
	Nutrition for Teens	High/Moderate	35 (56%)
		Low/Don't Know/No Answer	27 (44%)
	Aging/Elderly Nutrition	High/Moderate	45 (73%)
		Low/Don't Know/No Answer	17 (27%)
	Low Fat/Low Cholesterol	High/Moderate	49 (79%)
		Low/Don't Know/No Answer	13 (21%)
	Low Sodium	High/Moderate	52 (84%)
		Low/Don't Know/No Answer	10 (16%)
	Renal	High/Moderate	49 (79%)
		Low/Don't Know/No Answer	13 (21%)
	Weight Control	High/Moderate	54 (87%)
		Low/Don't Know/No Answer	8 (13%)
	Diabetes	High/Moderate	53 (86%)
		Low/Don't Know/No Answer	9 (14%)
	Fiber	High/Moderate	45 (73%)
		Low/Don't Know/No Answer	17 (27%)
	Gluten Restricted	High/Moderate	21 (34%)
		Low/Don't Know/No Answer	41 (66%)

Table 5. (cont.) Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey
RDN Respondents' Identified Needs for Practicing in the Pacific Region (n=62)^a

Survey Item	Response Category	Level of Need	n (%)
Level of need ranked for mode of educational tool most desirable	Educational Modules	High/Moderate	35 (57%)
		Low/Don't Know/No Answer	27 (43%)
	Printable Frequently Asked Questions (FAQs) sheets	High/Moderate	47 (76%)
		Low/Don't Know/No Answer	15 (24%)
	Printable Fact Sheets (in Portable Document Format form)	High/Moderate	58 (94%)
		Low/Don't Know/No Answer	4 (6%)
	Recipes Using Local Foods	High/Moderate	60 (97%)
		Low/Don't Know/No Answer	2 (3%)
	Videos	High/Moderate	43 (70%)
		Low/Don't Know/No Answer	19 (30%)

Footnote:

a. Out of 65 respondents who identified as currently practicing and providing direct services, 3 did not respond to these questions. Percentages are based on total responses for each question.

Discussion

This descriptive analysis of the HAND 2014 survey is unique and helpful in describing the practice of dietetics specific to the Pacific region. The demographics of populations served are important to consider when evaluating the practice of dietetics as culturally competent. Identified needs for resources that are culturally relevant and topic specific can inform the development of new resources, particularly those related to the prevention and treatment of chronic diseases. The importance of recognizing cultural differences throughout the US and the world for dietetics practices was addressed by AND through a series of articles in the Journal of the Academy of Nutrition and Dietetics; with first in the series published in March 2015⁷⁶⁻⁷⁸. AND recognizes and declares that culturally competent dietetics practice is essential when serving (minority) populations with health disparities⁸⁵.

Many references describing culturally competent practice suggest the first step in cultural competency training is to self-reflect and become more aware of one's own cultural identity, including learned values and worldviews^{87,88}. It may be interesting to know more about the demographics of the RDN practitioners in the USAP region, such as their self-identified ethnicities. Additionally, evaluation of the differences and similarities in cultural values and worldviews between practitioner and patients or clients could serve to uncover potential interactive challenges and/or culturally safe interventions. This could inform future practice of more culturally competent and safe care^{10,11,20,39-41,44,50,51}.

Populations served and the need for resources were primarily for Asian and Pacific Island cultures. It is not surprising that needs for resources in chronic, non-communicable disease topics were ranked as “high need” given the high rates within the USAP region, especially for the Asian and Pacific Islander populations^{2,3}. Future research could inform evaluation of RDNs interventions and experiences given the potential for cultural differences and histories of colonization, historical trauma, nutrition transition, and chronic disease patterns. Evaluating aspects of cultural safety (including the potential for power imbalances) may be informative in evaluating RDN interventions and experiences with populations served⁸⁹.

The AND survey, “Compensation and Benefits Survey of the Dietetics Profession”, conducted in 2015, drew a large probability sample of active Academy members (N = 51,909) plus nonmembers (N = 42,277). Unfortunately, it is not representative of the USAP region⁸¹. Although the number of credentialed RDNs in the USAP region is small (390)⁸², data collection specific to the USAP region can be helpful to inform a better understanding of dietetics practice and the needs identified when addressing the high rates of health disparities and chronic disease.

Furthermore, what we learn from the USAP region can have an impact in other areas of the world where Asian and Pacific Island populations have migrated. For example, an estimated 10,000 Marshallese have migrated and currently reside in Arkansas, now thought to be the largest population of Marshallese living in the contiguous US⁹⁰.

Lastly, many RDNs and the populations served have access and use the internet for nutrition related resources. This knowledge is informative for creating and disseminating

more relevant resources for the region and, potentially, throughout the world via the internet. The HAND 2014 survey also provides data on the use of the internet, Hawai'i Foods Website and related nutrient analysis activities. This data was not examined in this study.

Limitations

The number of usable responses (n=104) from the HAND 2014 survey does not necessarily reflect the demographics, practice characteristics and identified needs of all practitioners in the USAP region. Although it is not representative of all RDNs, with a response rate of 35%, it contributes new knowledge about dietetics practice in the region. In addition, RDN practitioners working in settings where patient interaction is their primary role, such as in clinical or acute care, community nutrition and long-term care, may have been more inclined to complete the HAND 2014 survey given its intent to identify needs for new, culturally relevant nutrition resources. Another limitation is that the RDNs identified the ethnicity of populations served. Populations who self-identify their own ethnicities would likely result in more accurate results of demographic data of populations served. Further study in the accurate identification of population demographics would better inform the needs related to culturally relevant care and resources. For example, the survey used the term "Micronesian" to categorize a vastly diverse group of people. To provide ethnic-specific relevant care, clear distinction should be made for populations served. Grouping of smaller ethnic groups into one generalized group may discount distinct differences such as language, food systems and diet, cultural values and beliefs around food and health. It would have been more useful to understand which specific ethnic group(s) within the "Micronesian" group were

being identified by the RDNs and how they determined the ethnicity of the populations they serve. Lastly, conducting surveys online in the USAP region can be a limitation due to lack of internet access, particularly in the more rural, isolated and traditional areas. Sending an invitation via email can be problematic as unfamiliar emails may be blocked by user settings or deleted.

Conclusions

Describing RDN practice needs and the populations served in the USAP region is critical as a first step to inform the potential for improving the practice of dietetics in relation to addressing the high rates of chronic disease in this region. The Pacific is socio-culturally, environmentally and geographically unique. This uniqueness necessitates dietetics practice that is culturally relevant to the region. Further research in the practice of dietetics in the USAP region could include exploring interactions and interventions of RDNs and the people they serve. With the diversity of cultures within the USAP region and the need for nutrition services, further research could inform recommendations for practice that is culturally relevant.

CHAPTER FOUR

AN EXAMINATION OF CULTURALLY SAFE DIETETICS PRACTICE IN THE US AFFILIATED PACIFIC REGION

(This manuscript will be submitted for publication to the Journal of Health Care for Poor and Underserved)

Abstract

Background. Dietetics practice is an integral part of health care services, particularly in addressing non-communicable diseases (NCDs). The practice of dietetics includes medical nutrition therapy in the prevention and treatment of NCDs. The USAP region is vast and culturally diverse with significantly high rates of NCDs - considered a “state of emergency” in some parts of the region⁸⁰. Within this context, the practice of dietetics is considered a unique phenomenon in the USAP region. Cultural safety is a theoretical framework for examining relevant health care practices in other regions in the world with similar population demographics, high burden of health disparities compounded by the struggle for self-determination and empowerment.

Objective. To examine dietetics practice in the USAP region, and to identify the dimensions of culturally safe health care in dietetics practice.

Methods. Key informant interviews were conducted to collect data on experiences of RDNs practicing in the USAP. The cultural safety framework was used to develop the interview questions and data analysis. Interpretative phenomenological analysis guided the qualitative data analysis of the key informant interviews.

Participants. Key informants were identified through purposive sampling. Snowball technique was used to create the sample of RDNs that were practicing in the USAP region.

Results. The analysis of the key informant interviews (n=18) revealed practice experiences which reflect cultural safety in the USAP region. Although, the RDNs did not receive cultural safety training, their experiences show evidence of culturally safe practice. Many of the participants shared, through self-reflection and self-awareness, how their own cultural background, being from the USAP region, influences their practice.

Conclusion. Dimensions of cultural safety are evident in the practice of dietetics in the USAP region. The culturally safe experiences described by the RDNs are unique to the region and which can inform new standards of practice for all RDNs, particularly when providing care to Indigenous and Asian populations in the USAP region. The integration of cultural safety into dietetics curriculum is a consideration for capacity building of new graduates as culturally safe dietetics practitioners. In addition, standards of culturally safe care in the USAP is translational to training programs and standards of practice for other health care practitioners in the USAP region.

Introduction

Health services research has tended to focus on cultural competency to address the high rates of health disparities amongst various ethnic groups with many resources for health care practitioners that address the provision of culturally competent care⁶⁻

^{9,86,87,92-97} . For the Registered Dietitian Nutritionist (RDN), providing culturally competent

care involves nutrition education and interventions requiring knowledge of the target populations and their diets, values and beliefs on health, lifestyle and disease process. While there is a consensus that diet plays a significant role in disease prevention, management and treatment⁹⁸⁻⁹⁹, there is less research on effective ways to interact in cross cultural dietetics interventions⁶¹.

In healthcare delivery and decision making, there has been a shift towards a “patient-centered” model, where the patient is more involved, engaged and invested in their overall care⁹. The Institute of Medicine defines patient-centered care as “providing care that is respectful of, and responsive to, individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions¹⁰⁰.” The goal of patient-centered care is to increase compliance with treatment goals and care.

Cultural competency and patient-centered care, demonstrate the importance of health care practitioners having knowledge and understanding of their patients’ values. But, the attention of these models is on the competency of the practitioner and not on the patient’s assessment of their own care. These models do not consider whether the patient feels their values are being honored and respected in the health services they receive. While cultural competency and patient-centered care approaches aim to improve the relevance and acceptance of health care delivery, they fall short in their focus on the quality of the interactions between the health care practitioner and the patient, from the perspective of both patient and provider¹⁰⁹. Some have argued that cultural competency, a Western notion for health professional practice, is a paternalistic and ethnocentric approach to care because it is practitioner-focused^{56,57}. Practitioner-focused care can lead to power imbalances or power struggles between the health care

practitioner (with tendencies toward paternalism), and the patient since the position of the patient in the relationship is not fully recognized, nor addressed.

Cultural safety is a concept that originated in Aotearoa (New Zealand) in the early 1990s, and is less well known in Western health services research. It is defined as providing care for people from different ethnicities and cultures within the cultural values and norms of the patient^{11,20,39-41}. Cultural safety is not about “knowing and understanding” but rather, practicing within the patient’s own cultural values and norms¹¹. It requires self-reflection of one’s own worldviews and values in interacting, particularly with diverse patients. The goal of cultural safety is to minimize inequitable and unsafe care of Indigenous peoples with histories of colonialism and marginalization by examining their interactions with their health care practitioners by linking poor health outcomes with culturally inappropriate and insensitive care. A few scholars have examined the applicability of cultural safety to health care services in the US¹⁰¹ and the United Kingdom⁴⁵. However, much of scholarly contributions have originated out of Aotearoa^{10,20,39-41,43,44}, Australia^{12,48} and Canada^{11,42,45,49-53} in relation to their Indigenous peoples – the Māori in Aotearoa, the Aborigines in Australia and the First Nations, Inuit and Métis in Canada. For example, in Australia, researchers have found that incorporating cultural safety into the practice of dietetics has improved the delivery of health services to Australian Aboriginal Peoples^{12,48}. In Canada, both the Assembly of First Nations (AFN) and the National Aboriginal Health Organization (NAHO) have officially endorsed the practice of cultural safety by health care professionals to improve the health status of First Nations, Inuit and Métis¹⁰⁷.

The US Affiliated Pacific (USAP) region is an expansive region with diverse Indigenous and underserved communities. The region has a long history of colonization, cultural trauma, and cultural identity challenges which has led to significant nutrition, lifestyle and health changes^{4,5,106}. The rates of non-communicable diseases have risen significantly and a State of Emergency declared⁸⁰. In the mix of the cultural milieu in the region, other ethnicities with similar high rates of non-communicable diseases include those identified as Filipino, Japanese, Chinese, and Korean^{2,3,22,23,32,33,103-106}. Therefore, evaluating health care service delivery, particularly in relation to RDNs and their practices in the USAP region, using a cultural safety theoretical framework, is most appropriate to address the nutrition, lifestyle and health challenges present. This may be especially pertinent as data from the Commission on Dietetic Registration (CDR) indicate as of 12/1/2013, there were 89,300 RDNs with active credentials⁸². Of these, (94%) self-identified as female; (82%) RDNs self-identified as White; and (1.5%) self-identified as Native Hawaiian/Pacific Islander. These demographics differ drastically from the RDNs practicing in the USAP region. Many RDN practitioners in the region are originally from the region and identify themselves as other than White⁸³. For RDNs not originally from the region, nor familiar with the culturally diverse populations in the region, this can pose challenges, if they are not properly trained and knowledgeable to serve the diverse populations in the region.

This study will examine experiences of culturally safe dietetics practice in the USAP region. The purpose of this examination is to describe the RDNs' experiences as shared in the interview process. The experiences will be analyzed to reflect cultural safety theoretical concepts, as 1.) self-reflection and self-awareness of their own experiences

within their own cultural context; 2.) relationship building with their patients; 3.) creating environments of respect, trust, acceptance, caring and empathy in their practices with culturally diverse patients; 4.) working through a social justice lens with considerations of power imbalances or power struggles in the health care setting/practice; and 5.) recognizing the potential for their patients to have experienced repression of their own cultural identities.

Defining Terms and Theories

Table 6 defines terms and theories commonly used in discussions of cultural competency, cultural safety, dietetics practice and the USAP region. These terms have been chosen as most relevant for this paper. The term “host culture” is not necessarily preferred as it suggests that the culture acting as the “host” has taken on that role, willingly. This research recognizes that in Indigenous societies, this is almost never the case. With that acknowledgement in mind, the term is used without intending any disrespect.

Table 6: Defining Terms and Theories

<i>Term/Theory</i>	<i>Definition</i>
Culture	<p><i>There are over 164 definitions of culture cited. For the purposes of this study, Purnell’s definition is most relevant:</i></p> <p>“The totality of socially transmitted behavioral patterns, beliefs, values, customs, lifeways, arts, and all other products of human work and thought characteristics of a population of people that guide their worldview and decision</p>

	making. Culture is largely unconscious and may have powerful influences on health and illness.” 87-108
Host Culture	The dominant culture of a particular place; Generally, the culture of the descendants of the population that inhabited the location prior to colonialization; May react negatively to immigration because of the changes that take place within their community such the introduction of new foods, food systems, cultural practices and lifestyles, other than their own, resulting in a repression of their own cultural identities ¹⁰⁹ .
Worldview	A theory/framework of values and ideas about the world and living in the world ¹¹⁰ .
Ethnic group	A community of people who identify with each other based on cultural, linguistic, and/or ancestral background ¹¹⁰ .
Minority	A group whose members have significantly less control or power over their lives than do members of a dominant or majority group. In the US, the dominant group is generally understood to be “White” ¹¹⁰ .
Indigenous	Based on the United Nations and the International Labour Organization characteristics of an Indigenous group include: <ul style="list-style-type: none"> ● Descendants from the pre-colonial/pre-invasion inhabitants of a region. ● Maintains a close tie to the land in both cultural and economic practices. ● Suffers from economic and political marginalization as a minority group. ● Self-identifies as Indigenous¹⁰⁹.

White	People of European descent, often referred to as “Westerners” or “Colonists” ¹¹⁰ .
Assimilation	The process with which a group’s culture is shifted or erased to adopt the culture of the dominant group ¹¹⁰ .
Power Dynamics	The hierarchal structures of influence and power that determine the amount of control that certain groups attain or lack ¹¹⁰ .
Cultural Dynamics of Difference	When two individuals from different cultures interface, both bringing aspects of their own worldviews along with assumptions and stereotypes about someone from the other group, resulting in cultural conflicts and misunderstandings that can impede the interaction ⁴⁶ .
Melting Pot Theory	A paradigm of cultural diversity in which various minority ethnic groups are expected to assimilate to the culture of the dominant group ¹¹⁰ .
Salad Bowl Theory	A paradigm of cultural diversity in which various groups retain their own, different cultural identities while contributing to a larger society ¹¹⁰⁹ .
Registered Dietitian Nutritionist (RDN)	Food and nutrition experts trained and credentialed in the US. The RDN credential is obtained by completing a minimum of a Bachelor’s degree, 1200 hours of a supervised practice/internship, and satisfactory completion of an exam provided by the Commission on Dietetic Registration (CDR). To maintain the credential, 75 continuing professional educational units (CPEU’s) must be earned every 5 years ¹

Dietetics Practice	The practice of dietetics is to identify and evaluate individuals for nutritional risk, provide medical nutrition therapy (MNT) and nutrition education and counseling to address prevention and treatment of one or more acute or chronic conditions. RDNs consult with the physician and the interdisciplinary health care team on the nutritional aspects of the client's/patient's treatment plan to promote person-centered care that is integrated and compatible with the client's/patient's goals. RDNs work in a wide variety of settings, including health care, business and industry, community/public health, education, research, government agencies and private practice ¹ .
US Affiliated Pacific (USAP) Region	The Pacific Island locations with US affiliation: American Samoa, Commonwealth of the Northern Mariana Islands, the Freely Associated States of Micronesia (including the countries of the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands), Guam, and Hawai'i ²⁷ .
Health Disparities	A chain of events signified by a difference in: (1) environment, (2) access to, utilization of, and quality of care, (3) health status, or (4) a health outcome that deserves scrutiny. This difference should be evaluated in terms of both inequality and inequity, since what is unequal is not necessarily inequitable ⁹⁹ .

Methods

Approval for the study was granted by the Human Studies Program at the University of Hawai'i at Mānoa.

Participants and Recruitment

Eligibility to participate in the study was credentialed Registered Dietitian Nutritionists (RDNs) in the USAP region at the time of the interviews (August – October 2016). The chain-referral-sampling method⁶³ was used to identify one primary representative key informant in each region of the USAP: Hawai'i, American Samoa, Guam and CNMI. No RDNs were known to reside in the Freely Associated States of Micronesia at the time and therefore that region is not represented in this study. The author CE has extensive (over 25 years) practice and dietetics leadership experience in the State of Hawai'i which has resulted in building relationships with a wide network of dietetics colleagues in the USAP region. The four primary key informants were known to the author CE as RDNs with experience in dietetics practice in their specific region. These four individuals provided the names of additional RDNs in their region. The snowball technique was then applied to identify additional RDNs. The snowball technique generated a list of 42 names. A standard invitation letter was emailed to invite participation, along with an attachment, providing more detail about the study, such as expected time commitment and a link to a pre-interview survey. The pre-interview survey was administered via SurveyMonkey® to collect consent and to screen for eligibility. The pre-interview survey collected demographic and practice information as well as solicited information for other RDNs to contact for the study. See Appendix B for the pre-interview survey.

Out of the 42 individual names collected, seven names were repeated twice and two names were repeated three times. Out of the 42 names, four RDNs declined to participate, 20 RDNs did not respond to at least two email invitations to participate and

18 responded to the email, completed the pre-interview survey, and consented to participate and be digitally recorded.

Data Generation and Interview Process

A cultural safety framework was used to create the interview guide questions^{11,20,39-41,51}. The questions were pre-tested among a group of ten healthcare providers in the USAP region, for clarity, understandability, and potential to invoke conversation prior to administration. See Appendix C for the interview questions.

Eighteen interviews were conducted over a three-month period. Interviews were conducted at a site that was most convenient for the participants. Nine interviews were conducted face-to-face; five at the participants' work site, two in the participants' home, one in the researchers' (CE) office at the University and one in the researcher's (CE) home. Out of the nine telephone interviews, seven were participants who lived and worked outside the State of Hawai'i, one was on another island within the State of Hawai'i (Hawai'i Island) and one lived on O'ahu and requested a telephone interview. Regardless of whether conducted via phone or in-person, the interviews were completed in the same manner, using the same interview questions and script. Telephone interviews did not allow for observation of body language therefore that aspect was not assessed in this study. Each interview included two researchers (CE and MKF); Interviewee CE asked the questions while MKF took notes. MKF did not participate in asking the interview questions nor engage in any conversation during the formal interview process. An important note: the words "cultural safety" were never mentioned in the interviews. This was intentional. It was suspected that if the

participants knew ahead of time that dimensions of cultural safety were being examined, the participants may have been inclined to prepare themselves by studying the concept of cultural safety in preparation for the interview.

Analysis Conceptual Framework

Through cultural safety literature, eight dimensions of cultural safety were identified and built into a framework to be used for analysis^{10-12,20,39-41,43,44,50-55,59,88,101,115}. The coding phase of analysis was guided by this framework as the phenomenon of interest. The eight dimensions of cultural safety are described as follows in relation to the practice of dietetics:

Eight Dimensions of Cultural Safety Framework

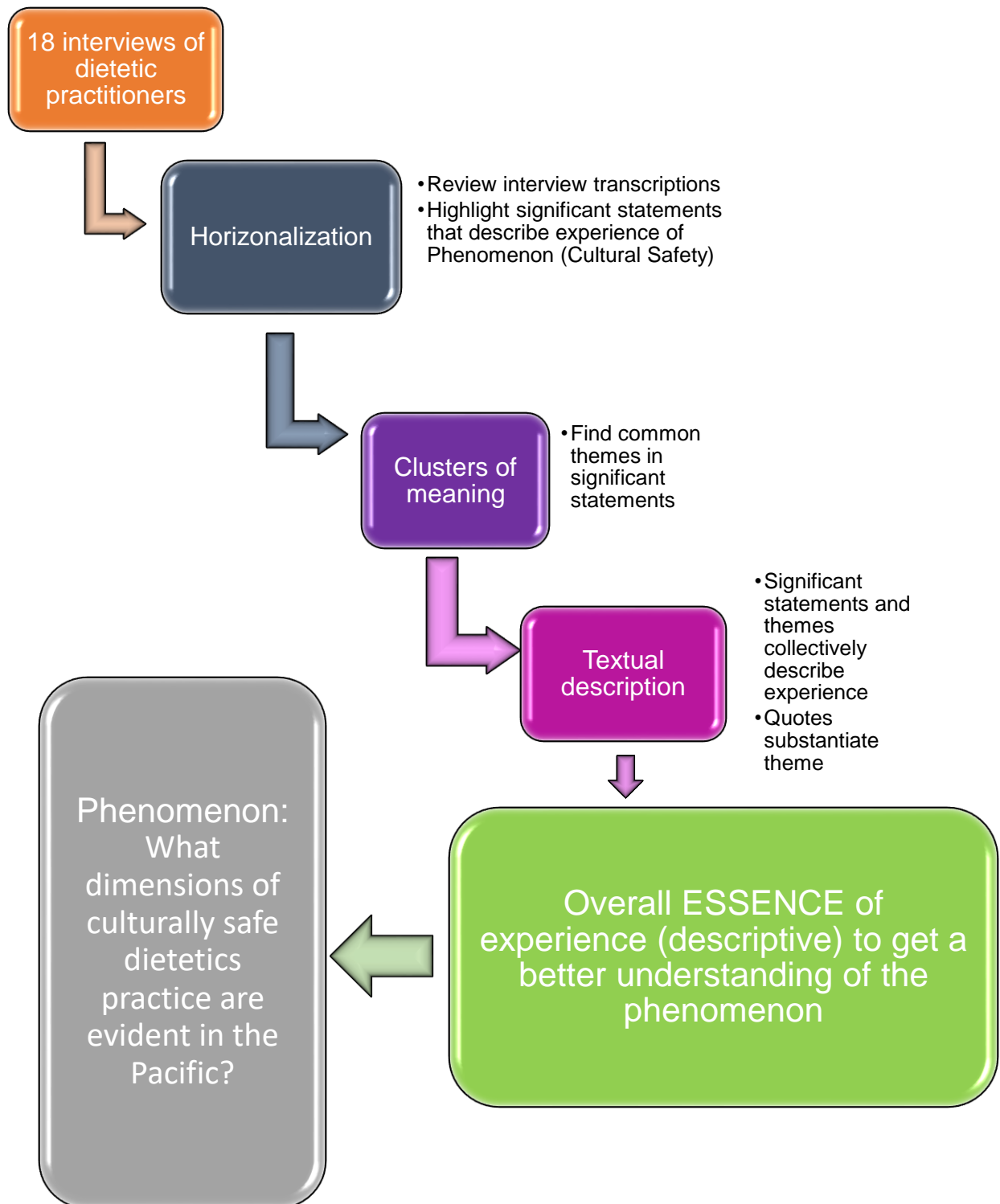
1. Self-awareness/self-reflection to one's own historical and social culture and location
 - a. Do RDNs know and reflect on their own historical and cultural experiences?
 - b. Are RDNs aware and reflect on their own tendencies towards bias and stereotyping of cultures within and outside their own?
 - c. Do RDNs acknowledge any differences between themselves and patients they serve?
2. Relationship building between patient and practitioner
 - a. Do RDNs intently practice with skills to build relationships with their patients?

- b. Have they learned what works (and doesn't work) within various cultural settings and populations?
- 3. Environment of respect, trust, acceptance, caring and empathy
 - a. What aspects of creating these environments are evident in dietetics practice?
- 4. Mutual goal setting
 - a. Are RDNs practicing goal setting as mutual – in other words, are they allowing patients to contribute to the creation of and, agreement to treatment, diet and lifestyle change goals?
- 5. Shared responsibility of care and treatment
 - a. Are RDNs including the patient(s) in creating the feeling of shared responsibility when discussing care, treatment options and goals?
- 6. Working through a social justice lens considering power imbalance or power struggles
 - a. Do RDNs recognize the potential for power imbalance or power struggles in their work environment – whether it's between colleagues and/or patient/provider relationships?
 - b. Do RDNs make efforts to minimize power imbalance – creating an environment where patients feel safe?
- 7. Empowering patients and community
 - a. Do RDNs make efforts to empower patients and communities to participate and, perhaps, lead changes to improving health?
- 8. Recognizing history of repression of cultural identities

- a. Do RDNs recognize this history and understand patients may feel repressed?
- b. What do RDNs do to minimize this repression?
- c. to build and enhance cultural identity as part of their care with diverse populations?

In the interviews, participants gave insights into the meaning of their dietetic practice experiences from their own perspectives. During analysis, the researchers translated that meaning to make sense of how the participants described their experiences while looking for the dimensions of cultural safety. See Figure 3 for a graphic of the interpretative phenomenological analysis approach applied to this study.

Figure 3: Interpretative Phenomenological Analysis Approach in Describing Dietetics Practice in the US Affiliated Pacific Region^{70,72,112}



Data Analysis Process

CE listened to each recorded interview and transcribed all recorded answers for each interview question into a Microsoft® Word document. Once the digital recordings were transcribed, they were permanently deleted. Each participant was assigned a letter of the alphabet to maintain anonymity during analysis. Each line within each transcript was given a number. All 18 transcripts were reviewed to get an overall sense of the transcripts. Notes about first impressions were indicated. A second, more comprehensive reading was then completed to highlight and label relevant words, phrases, sentences or sections that were instances of culturally safe dietetics practice. After the second reading, the highlighted content in the transcripts were categorized into a cultural safety data matrix that included the eight dimensions of cultural safety. Specific lines in the transcript document were also noted to provide specific examples.

Transcripts were first analyzed using “horizontalization” – which is the listing of every quote relevant to the experience. These quotes are categorized into preliminary groupings. Then, these grouped quotes are further categorized into “clusters of meaning” based on common themes within each grouping. For the purposes of this research, the common themes were the eight dimensions of the cultural safety framework, as described earlier. Textual descriptions are designed to describe the collective experience within each dimension of cultural safety (the phenomenon of interest). Direct quotes are used to root and substantiate the findings^{70,72,112}.

During the analysis phase, three dimensions of cultural safety were coded least. These three dimensions of mutual goal setting, sharing responsibility in care and empowering

patients/community were also compared with cultural competency theory and found to be very similar. Given that most interviewees (13/18) had some sort of cultural competency training, it was decided that the five remaining, and most coded, dimensions of cultural safety would be the focus of this examination. These five dimensions were collapsed into 3 major categories: (i) self-awareness and self-reflection to one's own historical and social culture and location; (ii) relationship building and creating an environment of respect, caring, trust, empathy, and acceptance between client/patient and RDN; (iii) working through a social justice lens, recognition of power imbalance or struggles, and potential for repressed cultural identities.

Before completing the analysis of all 18 transcripts, CE randomly selected four transcripts which were independently analyzed for cultural safety dimensions by MKF for validation and consensus. Findings from CE and MKF were compared. Congruence between both researchers was reached at 97% indicating that the analysis was valid and reliable. The remaining transcriptions were then analyzed. The findings from all 18 interviews were further reviewed by three researchers (CE, MKF, TD) as a means of triangulation. This method is used by qualitative researchers to check and establish validity in their studies by analyzing a research question from multiple perspectives to arrive at consistency across the data^{72,112,113}.

Recognizing the Strength and Experience of the Researchers

The three researchers who participated in this research are dietitians, 2 RDNs (CE and MKF) credentialed in the US and the third (TD) credentialed in Canada. Two of the researchers identify as Indigenous - MKF as Native Hawaiian and TD as a

Kanien'kehá:ka (Mohawk) woman from the Mohawk Territory of Kahnawá:ke (Canada).

The primary researchers (CE and MKF) have a wide range of experience working in the USAP region, and TD has experience working with Indigenous communities in Canada and Hawai'i. The researchers' familiarity with dietetics practice and Indigenous culture in the USAP provide distinct and relevant perspectives to the inquiry.

The Interpretative Phenomenological Analysis (IPA) process is a dynamic process requiring active roles of the researchers which influence the extent to which they get access to the participants' experience. This was accomplished by "speaking the same language" with the participants. RDNs asking RDNs about their practice experiences allowed for a deeper dimension to the data gathering and analysis. Through interpretative analysis, the RDN researchers attempt to understand the meaning of the participants' personal world. The analytical process in IPA is often described in terms of a dual interpretation process. First, the participants make meaning of their world through their descriptions in the interview process. Secondly, the researchers decode that meaning to make sense of the participants' meaning making⁷². IPA research also requires a careful, systematic, and rigorous analysis, requiring patience and openness to see the world through someone else's eyes – despite the fact that the researcher may be most familiar with this world. In this research, there were many discussions between CE, MKF and TD as a way of coming to an understanding of participant's experiences and their meanings.

Findings

Describing RDN Participants

16 out of 18 participants were current practicing RDNs at the time of the interviews. One participant was retired with practice experience in the region for over 50 years. A second participant held the credential of RDN and had previous experiences as an RDN practitioner in the region, but, at the time of the interview, was practicing as a Registered Nurse. The participants practiced in several settings including acute care, public health/community nutrition and renal dialysis. See Table 7 for further description of the participants.

Table 7. Description of Registered Dietitian Nutritionists Who Participated in Key Informant Interviews (n=18)

Survey Item	Response Category	n (%)
Gender	Female	16 (89%)
	Male	2 (11%)
Work setting	Acute/Inpatient	7 (39%)
	Ambulatory/Outpatient/Dialysis	2 (11%)
	Community or Public Health	
	Nutrition/Health Center	7 (39%)
	Private Practice	1 (5.5%)
	Other (1 = surgical nurse)	1 (5.5%)
Level of Education Completed	Bachelor's Degree	12 (67%)
	Master's Degree	4 (22%)
	Doctoral Degree	2 (11%)
Years in Practice	0-3 years	2 (11%)
	3-5 years	2 (11%)
	5-10 years	8 (44%)
	10-15 years	3 (17%)
	>15 years	3 (17%)
Years Practiced in US Affiliated Pacific	0-3 years	5 (28%)
	3-5 years	3 (16.5%)
	5-10 years	6 (33.5%)
	10-15 years	1 (5.5%)
	>15 years	3 (16.5%)
Practice Experience Identified By Island Region	American Samoa	3 (16.5%)
	Commonwealth of the Northern Mariana Islands	4 (22%)
	Federated States of Micronesia	0 (0%)
	Guam	1 (5.5%)
	Hawai'i	10 (56%)
	Republic of Palau	0 (0%)
	Republic of the Marshall Islands	0 (0%)

72% (n=13) of the participants had some form of cultural competency training either in their current position, or formerly. Out of the 13 respondents who reported having cultural competency training, only one described the training as routinely provided “once per year” through their place of work. Two respondents described their training as learned from their own indigenous health practices and “kupuna” (meaning “elder” in Hawaiian). See Table 8 for further description of the cultural competency training of participants.

Table 8. Cultural Competency Training Described by Registered Dietitian Nutritionists Who Participated in Key Informant Interviews (n=18)¹

Survey Item	Response Category	n (%)
Trained in Cultural Competency	Yes	13 (72%)
	No	5 (28%)
Currently Required to Complete Cultural Competency Training ¹	Yes	3 (23%)
	No	10 (77%)
Frequency of Cultural Competency Training ¹	> 1 year	0 (0%)
	Once per year	1 (8%)
	Once only	5 (38%)
	Never	0 (0%)
	N/A	1 (8%)
	Other	6 (46%)
Mode of Cultural Competency Training ¹	Via Online	2 (15.5%)
	In a classroom	3 (23%)
	N/A	2 (15.5%)
	Other	6 (46%)
Measurement Tool to Assess Learning of Cultural Competency Training ¹	Quizzes/Exams	3 (23%)
	Discussion with Trainer	2 (15.5%)
	Work Performance Evaluation	2 (15.5%)
	Patient/Client Satisfaction Surveys	3 (23%)
	N/A	6 (46.5%)
	Other	2 (15.5%)
Usefulness of Cultural Competency Training ¹	Most useful	10 (76%)
	Somewhat useful	1 (8%)
	Not useful	0 (0%)
	N/A	1 (8%)
	Other (relevant to practice)	1 (8%)

Footnote: 1. Five participants declined to answer this question

Cultural Safety in Dietetics Practice in the USAP

Findings on culturally safe dietetics practice in the USAP are organized into three major categories; 1.) self-awareness and self-reflection to one's own historical and social culture and location; 2.) relationship building and creating an environment of respect, caring, trust, empathy, and acceptance; 3.) working through a social justice lens, recognizing potential for power imbalances or struggles and loss of cultural identities. Each category has subcategories, found through analysis, which expand the dimensions of each category of culturally safe dietetics practice.

Self-Awareness and Self-Reflection to One's Own Historical and Social Culture and Location

Many participants revealed during the interviews a high level of awareness of specific cultural groups served and whether these groups were of a different or similar culture to their own.

Identification with Own/Host Culture

Without specifically asking about the RDN's own cultural identity during the interview, ten participants shared how they self-identified with the culture(s) they were serving. The participants described their expectation that they should know how to serve people of their own culture. This expectation is captured by one of the participants:

I'm Samoan, I'm supposed to know the culture. I'm supposed to understand and know the culture.

There's no other training. (Participant B)

Other participants spoke about "deeper meanings of their own culture" such as:

I knew what Hawaiian food was but didn't know Hawaiian mindset in creating diet. Every food has a spiritual essence. You feel you're in the realm of one of the Hawaiian Gods – this relates to the kapu (taboo/forbidden) system. Kupuna (Indigenous healers) from New Zealand taught me. The real purpose of “kapu” is to protect women – this is very important. Red fish is used in ceremony to represent human sacrifice – they don't want women to be sacrificed, therefore, they don't eat red fish. (Participant A)

This participant went on to explain a “cultural awakening” as a RDN:

When Hawaiians ate, it was like putting God in their mouth – similar to going to church and taking sacrament. When you eat, you're taking strength from Gods – becoming strong like God – channeling mana [spiritual power] of God – not only nutrition, but there's a spiritual essence in food. This was a real awakening for me. (Participant A)

Identification as Being “Outside” the Host Culture

Some participants, who were not from the community they practiced in, spoke about being “immersed” in the culture as “the best way of learning” the language and culture.

One participant described it as:

I'm from the states and so, I had to learn a lot more about the diet from firsthand experience, just talking to coworkers, locals, just going to the grocery stores, doing some food recalls, just immersing myself in the culture. That's really how I learned. With some collaborative meetings with other jurisdictions, I've learned a lot more from other people in the Pacific. (Participant D)

There were two participants that shared about being “adopted” into the host culture as:

The best way is to learn about cultural competency... I've been adopted by a Samoan family, I eat with them every Sunday. They teach me about the foods they eat. For inpatient care, it helps

me to understand the struggles from a cultural side. I've been here for 7 months now. (Participant O)

I lived with a Samoan family for the first year I was here. I learned how families live, prepare their food (traditional ways). I learned the language through their children. (Participant Q)

Lack of Resources in Remote Locations

Participants spoke about having no access to feeding tube pumps and minimal choices in their enteral feeding formulary due to lack of access and/or inability to keep items stocked with irregular shipments throughout the Pacific.

Because of the lack of resources, families prefer to do the tube-feeding themselves as its not available – we do have Nepro, Glucerna, Ensure, Jevity. But we run out and it takes a long time to be shipped here. Some families just make their own – it's cheaper. (Participant I)

In relation to culturally relevant and appropriate nutrition education resources, all participants described how they modify existing materials by crossing out foods not relevant to the population's food system and diet and writing in foods that are relevant.

Resources are low! Especially here in CNMI. I've tried to talk with several organizations and programs – there's just a lack of local resources. (Participant D)

Participants from outside the state of Hawai'i also commented on the lack of access to healthy foods.

I would like to see better food availability – it's an issue here. We don't get shipments of fresh produce regularly. It can be difficult to get in stores. It depends where you go during the week. Local produce is dependent on farmers and the weather, for example after Soledad, we lost mango, avocado and soursop. Availability – I was surprised when I moved here – thought there

would be more fresh fruits and vegetables. I haven't visited farmers in a while or gone to the market – but I do notice that the sea level is changing in certain areas. (Participant F)

Pressure to Reach/Maintain Western (Contiguous US) Practice Standards

Many of the RDNs mentioned feeling pressure or being unable to keep up with US standards, particularly those who were (reportedly) originally from the contiguous US:

I did my internship at [retracted] and consider myself up to date on research. The standards of practice in [retracted] are not up to date. It can be frustrating. (Participant O)

Another participant spoke of trying to reach expectations as:

To achieve the same standard as in mainland US, to me, it's exemplary. Especially if you're isolated in the middle in the Pacific. (Participant B)

Culturally Relevant Training

Lastly, many discussed their training as insufficient and irrelevant to the populations served in the Pacific.

When I was an RD in the states, I did cultural competency web-based in-services. It wasn't specific to the Pacific Islands. (Participant I)

The cultural competency training I've had is not relevant to Guam...It would be helpful to create a circle of Pacific RDs to share materials. I've used Hawai'i dietitian materials. I have cultural and dietetic knowledge that I received from the Dietetics program at [retracted]. I put that together with my knowledge of the culture here, that's what helps me with patient relationships. Cultural competency with language, with names from different regions in the Pacific is a problem. I often see incorrect information. (Participant P)

Others shared experiences in training that have been helpful in their practices,

...getting a [retracted] degree in Native Hawaiian and Indigenous Health in relation to populations that I serve - that has helped me a lot. (Participant K)

Communication is tough. There was a wonderful woman at [retracted] that spoke about communicating with Micronesians, especially Chuukese. She talked about social cues, dress, gender, interactions, when they talk with each other, they are polite and are expected to have pauses – contrast to mine, where we have word fillers (such as “um” and “uh”). We tend to not be comfortable with silence. If they are quiet, it’s not because they want others to speak, it’s polite to give pause, to allow time for translation in the mind. That was a golden nugget of information that she told everyone about. (Participant C)

One participant shared how they had to demonstrate cultural competency for The Joint Commission³⁶:

Joint Commission came twice and he pointed out that there wasn’t enough cultural sensitivity with menus. We developed menus translated into different languages (Mandarin Chinese, Korean, Filipino, Japanese) but the food wasn’t culturally sensitive. We worked to make a Japanese-specific menu, asking Japanese nurses. We made it very specific to Japanese (fish for breakfast, miso all the time) they wanted it and they were happy with it. (Participant C)

Overall, with self-awareness to their historical and social location, it is apparent that the RDNs working in the Pacific Island region recognize their own cultural background and how that impacts upon their provision of services to the populations they serve. There are special and unique challenges for the practicing RDNs with some from the region and possessing cultural knowledge while others have had to learn through immersion into the host culture. Many RDNs experience a lack of resources, particularly regarding culturally relevant nutrition education resources. And, some feel even though they are in

a very different part of the world, they feel pressure to reach and/or maintain US standards of care.

Relationship Building and Creating an Environment of Respect, Caring, Trust, Empathy, and Acceptance

Participants often spoke of the relationship building and creating respectful environments to establish respect, care, empathy, trust and acceptance with their patients/clients.

Approaches to Relationship Building

There were many approaches described by the participants when meeting with patients and clients. The use of humor was mentioned often, such as:

I use sense of humor – made fun of myself and that would help build the relationship. (Participant A)

I try and make them laugh, sense them out – know who will be nervous due to surgery. Laughing releases endorphins and helps the family too. (Participant C)

I establish rapport by laughing with them. (Participant O)

When introducing themselves to the patients or clients, RDNs described specific protocols to follow, or other means to build rapport/gain trust, such as:

Hawaiians always start out with where are you from? And, who they are... (Participant A)

In the populations that I serve, in building relationships, it's important to know who they are, also introduce who you are... the way we do it is saying our name, where we're from, finding out where they're from, what their name is – and finding any possible thing that could relate you to

them. Like my family, sometimes, that is a nice way to say “OK, we have this in common” –find something that you both can say or talk about – yeah, we have a common sharing, we have a common goal... and then, move from there. (Participant K)

Some of the participants spoke about the use of their credential or their health care provider role and how that could hinder the relationship building:

I see patients and try to not have a provider facade. I try to be more friendly and casual. It's easier, perhaps, because I'm local. ... I try to relate to patients because of the way I grew up, here. Maybe they are more honest because they know I understand. (Participant I)

The Dietitian word – it is a challenge, especially when you're working with a Hawaiian population. “dietitian” or titles to them don't really matter to them. Yeah, you've been through schooling, what matters is “do you care about me?” do you care about my family?” that's the most important thing people want to feel. It's important you qualify for your position, but it's more important for them to know – “are you going to be there for me?” ...something like that for a long time. I think the title, it doesn't help, more importantly to them “do you know my name?” (Participant K)

By not talking about nutrition first. I talk about them, their families, sharing a little to establish common grounds. It's important to be yourself. I can share Pacific culture through Chamorro culture. I introduce myself by saying I'm the one who can help with their diet – saying “dietitian” they don't know what that is... (Participant P)

In addition, there were specific body language cues described, particularly ensuring that they stood at equal or below eye-level of their patient/clients:

It's not in good form to stand-up. (Participant A)

I tried to sit down instead of standing over them and talk at their eye level. (Participant C)

Towering over the patient at the side of bed – that doesn't come off very well. (Participant J)

Standing over patients is not good – I should be at a lower height or equal to them. (Participant P)

Another important practice noted by seven of the participants described the importance of listening, allowing for silence and time for patients/clients to talk. The following quote also describes an instance where there is a shift of power as follows:

I don't try and keep conversation going, I pause, give them time to think. I give them a chance to process – not transposing own needs or wants onto them. I have them decide what they want to focus on – diet composition or treatment. (Participant R)

Building an Environment of Respect

The idea of “respect” was most common when discussing the interactive environment. All participants described showing respect with their clients/patients through at least one or more of the following experience: (i) respecting the elderly; (ii) using appropriate language (e.g., “Tulou” (translated as “excuse me”) when passing someone in American Samoa); (iii) trying not to offend anyone; (iv) using Pidgin English when appropriate; (v) being humble; (vi) learning appropriate body language; (vii) respecting the hierarchies of clans within families and/or communities; (viii) honoring their belief systems; and (ix) respecting the “village ways”. One of the participants explains this below:

In the Samoan culture, it's like when you're brought up within that context, of having respect for the elderly, the older people, having respect for your older sister, or brother, So, it's easy when you transition to the work, you automatically know you have to pass that onto your patient. so, in Samoan culture, we're not supposed to stand up and talk, right? When a patient is sitting on a chair. Respectful way is to sit down in a chair and having a conversation with patient face to face rather than standing up when the patient is sitting down.

The other thing is in the Samoan culture, you're not supposed to speak with the mouth full. The next one is that when you walk in between people, you have to say, there's a word to show respect –you say "tulou" means you are excusing yourself from walking in between, especially if they're close together. (Participant B)

When visiting an elder – especially Chamorro, I have to be more stand-offish and caring versus authoritative. (Participant I)

Building an Environment of Caring and Empathy

Most of the participants spoke about working with passion/compassion and showing patients/clients that you care. Four participants commented on the importance of having accurate translators to avoid misunderstandings and ensure the patients/clients felt cared for. One participant spoke about attempting to speak according to the patient's level of comfort:

Because, I'm Haole [term used to refer to Whites in Hawai'i], I get a lot of "Ho, you speak Pidgin, yeah?" In talking with patients, I talk the way... I reciprocate. So, if they are speaking very straight forward English, I do that too. Yeah, I turn it on and off. It depends who I'm talking with and how they're comfortable. I feel like being here, and being able to have that understanding, being a chameleon off and on, change as needed, I think that's very important. (Participant J)

Another shared, showing empathy by being from the host culture:

We start out with talking about ourselves – where we grew up, the ways we used to eat. It takes time and education.... I prefer to understand where they are at, I was once there. I grew up local so I understand their challenges from all over. (Participant E)

Building an Environment of Trust/Acceptance

Trust and acceptance seemed to be very important in relation to respect. If one showed respect, the RDN is more likely to gain the trust from the patient/client. Several participants described creating a “safe space” for patients and clients, such as:

We are actually really intentional about relationship building. Nothing is done without some type of relationship building. We do a lot around meals and food, whether it's up in the garden, planting food together, down at the café serving food, or having meals together. Another thing that we do is the aloha circle and mahalo circle. In the aloha circle, everyone states what their name is, where they're from, where they live or were born and so we really feel connected, and then to bring a kupuna with them. What that does is level the playing field. (Participant G)

The other thing is we always close with mahalo circle. Those seem simple, but very important to our work. We do those constantly to make sure that we're all comfortable with each other. We all bring our history and our culture to each other. It's a beautiful way to connect with each other. We make space for telling stories - space for connecting. We use plants and food a lot. Micronesian, Auntie X, uses a plant one way, while Samoan Uncle Y uses the plant another way. So, we talk about the commonalities. (Participant G)

RDNs have special knowledge specific to the populations they serve in regards to building relationships – overall, they spoke about these concepts with great importance, as if this was the core to their practices.

Working within a Social Justice Lens, Recognizing Potential for Power

Imbalances and Loss of Cultural Identities

Many of the responses in the interviews expressed feelings of repression, power imbalance or power struggles (as described in the methods section) – whether the interviewee, themselves felt this or were acknowledging their understanding about

clients/patients having such feelings and experiences. Some participants described feelings of struggling between Western worldviews and values and the current environment of the RDN's practice in the USAP region, particularly if the RDN was from that region.

Conflicting Worldviews and Values

Western, Eastern and Indigenous worldview and values are all apparent in the USAP region. This is not surprising given the history of migration patterns and colonization. Most experiences were reflective of recognizing, knowing and/or appreciating non-Western worldviews and values.

One interviewee simply expressed, when seeing patients:

It's not OK to have an American attitude. (Participant A)

The following quote exhibits an internal struggle for the RDN - between her home cultural values and her "formal training" on the mainland US:

With elders, I was taught to respect, and not to speak in a certain manner. I know that I can't really tell elders what to do. Although I know better from my formal training – I knew I would find myself stuck in the middle when I came back to Saipan. I try to say things in a caring manner vs. authoritative manner. I am comfortable to operate that way – it's an instinct. (Participant I)

The following quote describes acknowledgement and working within the values of the patient:

In the Pacific, the concept of health is abstract. Cultures are resilient because they're trying to survive and prevent sickness. They want to be healthy – it's psychological, not just physical. They

want to prevent what uncle and aunty have – being sick. Sickness is so common and prevalent that it's changed their perspective - it's not about how to be healthy, but who do we know with diabetes and how not to get there. When I frame it that way, then they pay attention. (Participant P)

Power Imbalance or Power Struggles

Some spoke of having sensitivity to recognizing sources of power within families, communities or in the workplace as:

You have to read the patient, determine the family involvement – sometimes, that's very apparent. You can see who speaks up, who stands up, who gets in the way, who needs to feel like they have the power. (Participant J)

We also serve patients with no insurance, sometimes there are patients that don't have papers, they don't have legal status, and we are just treating them, because we don't turn anyone away....And so, I'm sure that some patients that don't have paperwork, they may not feel that they have power. They just kind of come here and hope that they can get dialyzed. (Participant D)

The second quote above is interesting on several levels. The setting of this experience was in a dialysis center. Despite whatever power the patients felt (or didn't feel) they are in need of dialysis treatment. If one is turned away from dialysis, it could be life-threatening in a very short amount of time (a few days). The patient may not have felt "power" because they have no choice – they need dialysis to live, and yet, without "papers", apparently, they might feel they can be turned away.

Within many Indigenous communities there are hierarchal systems. For example, chiefs or Elders speak for and lead community decisions and changes. The following quote represents acknowledgement of a chief hierarchal system within the context of health

care indicating that despite some patients' hierarchal status, all patients receive the same care:

There are also some males with chief title in here [dialysis unit], so they're all mixed and there's no difference in treatment or care. They all get treated. Chiefs don't get treated special.

(Participant B)

Racial hierarchal systems are apparent as described:

I don't know if you experience it there, but there's a local population, Indigenous population of Chamorro...there's a hierarchy in terms of the Asians and the Pacific Islanders. And, I didn't make this up, one of the locals told me about it – about how people are viewed here. Even with the Chamorro, then, there's the other Pacific Islanders, then, the Filipinos. So, the Filipinos are contract workers too. it's a sensitive thing here, if there's anyone who's trying to speak out, speak up for themselves...or if there's any issues, whether it's a staff issues or patient issues. There's legal status and residency status issues amongst both groups. So, I think sometimes, there are ethnic groups that are not respected as much. I mean, I see it. (Participant D)

The following portrays an experience that is reflective of a common healthcare power dynamic⁵⁷ – in this case, between the RDN and the physician. Without order writing privileges, RDNs struggle to have physicians approve and write orders per RDN recommendations. This challenge is further complicated by RDNs working with physicians whom are not approachable:

Definitely, one or two physicians have macho intimidating attitudes. It can be difficult when you need tube-feeding orders. (Participant I)

Another participant spoke about experiencing a power imbalance as an Indigenous practitioner trying to foster and support Indigenous healing practices while being

challenged by the Western health care system not supporting the same values as follows:

So, the fact that our power imbalances go to our government... White people running a brown state. It's just true that our land is not held sacred, the things that we value is not held sacred and it's not within our power. For us, we're a [retracted type of facility], and so the fact that our doctors prescribe *olena* [turmeric], that has no worth to our government, we don't get reimbursed unless you prescribe a medicine. Yeah. (Participant G)

One participant spoke about being the source of power:

Patients think of me as knowledgeable, I'm taking care of them, they're trusting me. There's power in that way - in that they are relaying on me and my knowledge. (Participant M)

This section of the findings was quite diverse as power was evident in various situations and settings. There seems to be a heightened sensitivity to the potential for or the existence of power imbalance or struggle. Most of the RDNs interviewed were very aware of the sensitivity associated with acts of power – particularly acts of dominance displayed by Western values or authority. Knowing and understanding the potential for patients in the USAP region to be sensitive to any acts of power or dominance given their histories of colonization is crucial in providing culturally safe care. Colonization is considered a traumatic experience. The colonized generations are the direct recipients of a loss of cultural identity; and today, suffer from depression, hostility and chronic bereavement. The subsequent generations are affected by the historical trauma through their parents and grandparents¹¹⁴.

Feelings of Repression

Some participants discussed through their own experiences of repression, oppression, and discrimination because of their own cultural identity, they were very familiar with the potential for patients to feel repressed as:

I learned to be more compassionate since I did receive discrimination in my hometown and at work. You know the feeling and can identify by the look on their faces if you, yourself, are recovering from discrimination. (Participant A)

Another spoke of feeling oppressed as a first experience in a professional setting, as:

I was Hawaiian and no one else was. Everyone looked at me like I had leprosy. The president stood up and said to introduce only the new people – I was embarrassed to say anything until [retracted] came in to introduce me from across the room. The best thing that happened was an old speckled lady came up to me [retracted] and said she was glad to meet me and that she'd been waiting to meet me to have a Hawaiian RD. (Participant A)

This participant was acting as a patient advocate in the experience of watching a patient be oppressed – discriminated against because of their history as a “drug-seeker”:

Patients that would lose trust in us are the ones that come in and out of the hospital. One patient with severe gastroparesis, unfortunately a known drug seeker but her gastroparesis was really bad. Unfortunately, she was just written off. One patient complained about a hospitalist and I told her she has the right to ask for another MD. (Participant C)

Some participants were learning about the potential for their patients to not trust “the system” because of their histories of repression, as:

We had a cultural competency training by a Micronesian trainer – she gave us lots of examples – especially personal. It was based on Micronesian centered behaviors, body language, etc. It was only two trainings. They helped us to understand why they (Micronesians) are here, the

relationship with the US – the Compact. We discussed family dynamics at home, etc. She let us know in this population, they want people to be happy with them so they say “yes” and “OK” to everything. Many don’t trust the US Government. They question what their Medicare benefits really are. (Participant R)

This was a difficult and quite intense section of the interview process as well as the analysis phase. The RDN participants were very candid in their responses – perhaps, since many of the participants personally knew the research interviewers. It is felt that this section is very important in examining cultural safety. Some responses may be considered culturally unsafe dietetics practice. The following are some examples:

My strength is that I do have a western background and I understand that. But the cultural part has been from home. I can read off a list of ways in Western training where cultural training was completely poo-pooed [dismissed] um... I remember one person came to me once and said, “I read something that says there’s mana [spiritual energy] in Hawaiian food, that’s so ridiculous”. It was someone I was in school with, one of the students that I was learning with. She wasn’t Hawaiian, and so she totally didn’t understand that. There’s nothing that would ever contradict that in the learning that we did. (Participant G)

When I go to [retracted]... they don’t let the mothers chew their food before giving it to the children. We have an ‘Ōlelo No’eau (Hawaiian Proverb) that talks about that – you’re not sucking the nutrients [out of the food] but, you are embuing onto them [the baby] all the traits and attributes that you want to pass down. We didn’t really have an ethnic food class but it was out of that ethnic food class [we did have], you cooked foods from different regions. That was our only cultural training. And so... we had none. (Participant G)

The two quotes above are taken in part from the participant and interviewee’s conversation as the participant and interviewee reflect back on their own experiences, as college classmates in a dietetics program in the USAP region. As a Native Hawaiian,

Participant G was offended by classmates and the lack of appropriate cultural training relevant to the USAP region. This part of the interview with Participant G progressed to the topic of more recent experiences as a dietetics preceptor for dietetic students and interns. It became very apparent that the needs were to train dietetic students and interns, not only with more cultural relevance to the USAP region, but to train more RDNs *from* the region. The need for capacity building of RDNs within the USAP region was expressed and evident in several other interviews in this study. One participant shares the following thoughts:

I feel like if we could really get people in the field that can really help. And so, nutrition is one of the ones where we don't have a lot of ethnic minorities and if we do, either they are western trained or they're not doing programs from cultural perspective...I take dietetics students throughout the year. It's funny, because they really do come in with one mindset and leave with another. We make sure all interns work in the garden, the cafe, and the community programs. So, they understand the full connection...That's not really happening...the system nowadays. Also, for past couple of years, I have taken the dietetic students from Montana – I like that they have a bit of Agricultural background. And so, they've been pretty good – the 2 that I've had. We take some medical students, social work students, 3 dietetic students. (Participant G)

When I was in [retracted, University], a long time ago, what year? 80's early 90's, we never went out to a do work in the land at all. Our cooking class, was defined by the ethnic book that we were reading. I'm surprised about how many dietitians can't cook. They don't have any relationship to the earth, the land you walk on. It's a real problem. I think they need to have a little more connection, for the students we can offer that here. They always walk away with a different perspective...Dietetics students choose whether or not to come here. I usually get one student. I do orientation, but then they choose to come back – so they don't get training. If there's another way, we could build in some dedicated time. We want to do a tour on the land, maybe once a month. (Participant G)

Discussion

The findings of this study demonstrate that RDNs in the USAP region demonstrate certain dimensions of culturally safe care. The most prominent dimension of cultural safety was that of self-awareness and reflecting on their differences (and similarities) with the populations served. Whether dietitians were from the host culture or a new-comer to the islands, they generally recognized the uniqueness of the various cultures and nuances of cultural foods, values and behaviors within the USAP region. The RDNs recognize that they have learned how to modify their practice to encourage better relationship building, ensuring environments of respect and trust, and acknowledging the risk for their patients/clients to feel “unsafe” through histories of repression and social injustice.

It is apparent that culturally safe dietetics practice is present although no formal training in cultural safety has been completed by the practicing RDNs in the region. Prior to this research, the assumption was that cultural safety may be practiced, intuitively, due to the regional similarities with other countries that have adopted cultural safety into their health care systems with consequential positive patient outcomes— such as in Aotearoa^{10,20,39-41,43,44}, Australia^{12,48} and Canada^{11,42,45,49-53}. Although 13 participants did report having some type of cultural competency training in their career, five participants reported not having any form of cultural competency training at all. This is curious to note. All participants of the study shared some form of culturally safe practice. It is plausible to suggest that due to many of the participants sharing of being from the host culture, it is likely they already know, understand and respect the culture from that region. As suggested earlier, capacity building of RDNs within the USAP region would

develop dietetic practitioners practicing within their own cultural context resulting in culturally safe care. Other RDNs, not from the region, could learn from these culturally safe practitioners. Through the interviews, some of the participants shared that they were not from the host culture, but were very aware of the cultural differences and consequently immersed themselves in learning – some by being adopted into host culture families. This type of adaptation was recognized as necessary for them to practice in a region very different from their own cultural background.

Larson et al. describe a baccalaureate nursing program that developed and implemented an international cultural immersion course in Guatemala to explore the impact of cultural immersion on student nurses. As the students lived with their host families, their shared experiences emerged into three themes: navigating daily life, broadening the lens, and making a difference. The study revealed an expanded context and worldview of the host culture. International service learning seemed to pervade all aspects of the students' experience. Exercises in participant-observation and reflective writing were suggested to enhance student self-awareness and the ability to benefit from a cultural immersion course¹¹⁵. While it's probably not feasible for all new-comers to live with host families, it is suggested that there is a learning curve to get acclimated to the cultural practices, values and worldviews of the host culture. How one accomplishes this is the question. It is not about learning from a textbook – rather, living it through experiences.

One study entitled “Community as Teacher Model: Health Profession Students Learn Cultural Safety from an Aboriginal Community” suggests that “the ways in which

students developed cultural awareness, sensitivity, and safety came from spending time in the community and getting to know community members”⁵³.

Further, the RDNs in this study are practicing with skills and knowledge they did not necessarily learn or gain from their dietetics training. Rather, it is hypothesized that these experiences are acts of adaptation to the cultural environment within the RDN's practice in response to learning and/or already knowing about and being from the populations they serve. Further research is needed to examine the potential positive outcomes of incorporating cultural safety training into dietetics curriculum and practice. Perhaps, capacity building within the region, promoting diversity in dietetics training, accepting students with diverse backgrounds from the host culture, providing culturally safe guidance and support, would prove beneficial for developing dietetics practitioners in the region. Fialkowski et al., suggest training programs for underserved Indigenous populations with a focus on providing individualized and adaptive program support¹¹⁷. Capacity building includes the use of mentors, teachers and preceptors from the host culture and region, as well⁴⁸.

Accreditation requirements mandated by The Joint Commission (TJC)³⁶ make it imperative that all healthcare providers be culturally competent to provide culturally competent care and increase patient satisfaction, particularly in addressing minorities with health disparities. The RDN is not mandated by their own credentialing agency to be “culturally competent” rather it is typically driven by their place of work (i.e. acute care facilities maintaining accreditation standards set by TJC). Obtaining cultural competency training is highly encouraged by the Academy of Nutrition and Dietetics with continuing professional education units (CPEU's) offered¹¹⁸. But, in populations as

diverse as the USAP, there is concern that cultural competency may not be the appropriate framework.

As noted in Setiloane's "Beyond the Melting Pot and Salad Bowl Views of Cultural Diversity: Advancing Cultural Diversity Education of Nutrition Educators", cultural competency training often falls short by teaching about ethnic groups as "laundry lists" of characteristics, traditional beliefs and behaviors by ethnic group¹¹⁰. This approach does not appreciate the importance of that first step in self-awareness by the practitioner.

There are success stories that we can draw upon such as Foley et al ¹². In fostering culturally safe care involving building trust with patients, while recognizing the power differentials resulting from socioeconomic conditions, history, politics and health; the dietitians improved the availability, acceptability and appropriateness of dietetic services for Aboriginal and Torres Strait Islander people ¹².

In Jackson et al, four Australian Aboriginal academics in collaboration with a non-Indigenous colleague delivered an intensive workshop for master's level post-graduate students. The objectives of the training were to explore their existing understandings of Indigenous people (self-reflection), the impact of ongoing colonization, the diversity of Australia's Indigenous people, and developing respect for alternative worldviews.

Through personal stories and interactive sessions, students were challenged intellectually and emotionally by the content. In the end, most students described feeling transformed by the content, better informed, more appreciative of other worldviews and

Indigenous resilience and better equipped to contribute in a more meaningful way to improving the quality of health care for Indigenous people⁴⁸.

The USAP is largely influenced by Western worldviews, values and lifestyles with its history of Western colonization and as it continues to be affiliated with the United States. Conversely, the USAP is geographically the most isolated region in the world, consisting of residents Indigenous to the region, immigrants who have stayed for generations, and new-comers. Borrowing from our neighboring countries with similar Indigenous histories and diversity in populations, we can begin to adopt these culturally safe practices into our own health care services. As this study shows, RDNs in the USAP are already achieving that in their practice.

Limitations

The authors were unable to determine whether the populations served by these RDNs did indeed feel safe. Given the principles of cultural safety, it is the patient or client receiving the care that determines whether the care is culturally safe.

Another limitation was the researchers did not systematically collect information on ethnicity and cultural backgrounds and experiences of the RDN interviewees. What we know is what they were comfortable in sharing through conversation.

In the method of recruitment, the researchers relied on the availability and willingness of RDNs to participate in the lengthy (typically an hour) interviews. The sample was largely representative of the Hawaiian Islands. There was only one RDN from Guam. Ideally,

the researchers should have met with the dietitians in person, but this was geographically and financially excessively burdensome.

Implications for practice

This study can inform the development of cultural competency, or more appropriately, cultural safety training and the development of resources and tools, specific for practicing RDNs in the USAP. These findings could be helpful to other practitioners in the region as well as inform practitioners with similar populations served in other parts of the country and world.

Conclusion

RDNs in the USAP are tasked to be effective practitioners in a region with high rates of health disparities within the Indigenous populations of the Pacific as well as other minority ethnic groups. However, RDNs in the region may not have the necessary resources and training to be effective as culturally safe practitioners. Despite that, this study identified culturally safe practices that RDNs discuss through their experiences working with clients in the USAP, and have acquired perhaps through their own knowledge of the host cultures and/or through immersing themselves in learning. Through this qualitative study, key informants shared experiences of dietetics practice with cross cultural patients and expressed how they achieve culturally safe care that can inform other practitioners in addressing health disparities through dietetics practice. Being a culturally responsive and safe practitioner is important especially in a region as diverse and expansive as the USAP.

CHAPTER FIVE

CONCLUSION

This doctoral research contributes new knowledge on the practice of dietetics in the USAP region. Through the dietetics practice experiences by the primary researchers (CE and MKF), this research was developed.

The descriptive analysis of the HAND 2014 survey provides information on the practice of RDNs in the USAP region and their needs for nutrition education resources that are culturally specific to the populations served. This study further examines the practice of dietetics in the USAP region by interviewing key informants that describe experiences expressing dimensions of culturally safe care. It is not common for health care practitioners to examine their own practice experiences and call upon their colleagues to share in their experiences. Given the vastness of this geographic region, many practitioners may be practicing in silos, not necessarily knowing or sharing their resources and experiences. Through this study, wonderful work is being done in addressing the cultural diversity and needs of patients throughout the USAP region as identified, recognized and shared in this dissertation. This author believes that in the USAP region – albeit, with significant rates of non-communicable diseases- RDNs are working towards improving the health status of their patients and clients served. It is the hopes of this author that this research will prompt the creation and sharing of culturally relevant nutrition education resources and stories of success in practice. Next steps could include a pilot study examining the intentional incorporation of a cultural safety

training program into a practice setting would be informative towards assessing efficacy, patient satisfaction and the potential for improved patient health outcomes.

Dietetics practice is unique and exceptionally special in the USAP region. It requires training and resources specific to the diverse cultures in the region. Having these resources and skills ensures health care practices that are culturally safe and relevant to the populations served. As described in this research, some practitioners have already grasped the dimensions of cultural safety in their practices. As an appropriate way to close this research dissertation, one participant explains:

Nutrition problems are things that you would generally see not only in our indigenous populations but due to loss of land, colonialism, loss of power within your own home state. And so, when we're addressing them, we're not just addressing, strictly diabetes or the general diabetes class or something like that. We're trying to reconnect them, strengthen their cultural ties. We're trying to strengthen all the connections they have, to make them a healthy person – whether it's to the community, to their spirit, to their family, to their culture. And we use food to do that. (Participant G)

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APPENDIX A: Hawai'i Academy of Nutrition and Dietetics (HAND) 2014 Survey

Thank you for completing this survey. Your responses will assist University of Hawai'i and The UH Cancer Center to improve the Hawai'i Foods Website. Knowing more about you and your work will enable us to better meet the needs of nutrition educators and others as we develop resources to help people make healthier food choices.

PART A: The following items relate to you and your work. Please check the best response for the questions below.

** Questions #1-7 are mandatory questions to be answered, otherwise survey discontinues.*

*1. Are you a member of the Hawai'i Dietetics Association?

- ☐ Yes
- ☐ No

*2. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other:

*3. What county do you live in?

- ☐ Hawai'i
- ☐ Honolulu
- ☐ Kaua'i
- ☐ Maui
- ☐ Outside of Hawai'i (please specify)

*4. Which best describes your current status?

- ☐ Registered Dietitian (RD) / Registered Dietitian Nutritionist (RDN)
- ☐ Dietetic Technician Registered (DTR)
- ☐ Student
- ☐ Other (please specify)

*5. In the field of nutrition, how many years of work experience do you have?

- ☐ I have no experience
- ☐ I have little experience (less than 1 year)
- ☐ I have one or more years of work experience (please indicate # of years:_____)

APPENDIX A: HAND 2014 SURVEY (page 2)

*6. Are you currently working in the field of nutrition?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

PART B: The following items relate to the focus of your work. Please check the best response for the questions below.

*7. Which best describes your current work setting?

- ☐ College/University/Teaching Facility
- ☐ Community or Public Health Program
- ☐ Contract Food Management Company
- ☐ Food or Equipment Manufacturer, Distributor or Retailer
- ☐ Government Agency or Department
- ☐ Hospital/Acute Care
- ☐ Long Term Care/Extended Care/Assisted Living/Rehabilitation
- ☐ Nonprofit Agency/Organization
- ☐ Out-patient Care or Ambulatory Care
- ☐ Pharmaceutical or Nutrition Products Manufacturer, Distributor or Retailer
- ☐ Private Practice
- ☐ School Food Service
- ☐ Other (please specify)

8. Do you currently provide direct nutrition-related services to individuals and/or groups?

- ☐ Yes
- ☐ No

[For the following two questions, #9 and #10, participants were asked to rank each categorical choice as always, most of the time, sometimes, rarely, or never]

9. How often do you provide services in each of the following SETTINGS?

- ☐ One-on-one
- ☐ Small groups (10 people or less)
- ☐ Larger groups (>10 people)

10. How often do you provide services in each of the following MODES OF COMMUNICATION?

- ☐ In-person
- ☐ Telephone (including texting)
- ☐ Internet (including email, Skype, etc.)

APPENDIX A: HAND 2014 SURVEY (page 3)

11. Which age groups do you serve in your work? (check all that apply)

- ☐ Children (0-12 years old)
- ☐ Teens (13-17 years old)
- ☐ Adults (18-59 years old)
- ☐ Seniors (60+ years old)

12. Which age group do you serve more? (check all that apply)

- ☐ I don't serve a particular age group more than others
- ☐ Children (0-12 years old)
- ☐ Teens (13-17 years old)
- ☐ Adults (18-59 years old)
- ☐ Seniors (60+ years old)
- ☐ Other (please specify)

13. In what areas do your TYPICAL clients/patients live? (check all that apply)

- ☐ Oahu - City of Honolulu, including Hawaii Kai, Waikiki, Salt Lake, Moanalua
- ☐ Oahu - Windward, includes Waimanalo, Kailua, Kaneohe
- ☐ Oahu - Central, includes Aiea, Pearl City, Waipahu, Mililani, Wahiawa
- ☐ Oahu - Leeward, includes 'Ewa, Kapolei, Makakilo
- ☐ Oahu - West, includes Nanakuli, Waianae
- ☐ Hawai'i Island
- ☐ Kaua'i Island
- ☐ Lāna'i Island
- ☐ Maui Island
- ☐ Moloka'i Island
- ☐ Outside Hawai'i (please specify)

14. Over the past 12 months, approximately how many clients/patients did you serve on a MONTHLY basis?

- ☐ 1-10
- ☐ 11-25
- ☐ 26-50
- ☐ 51-100
- ☐ >100

APPENDIX A: HAND 2014 SURVEY (page 4)

15. Check TOP THREE ethnic groups which best describe your clients/patients served most often: (check only three)

- ☐ Black/African American
- ☐ Caucasian
- ☐ Chinese
- ☐ Filipino
- ☐ Hispanic/Latino/Spanish
- ☐ Japanese
- ☐ Korean
- ☐ Native Hawaiian/Part-Hawaiian
- ☐ Samoan
- ☐ Micronesian
- ☐ Vietnamese
- ☐ Other (please specify)

[For Question #16, participants are asked to rank their needs as high need, moderate need, low need or not applicable/don't know]

16. Among ALL ethnic groups you serve, identify level of need for MORE culturally relevant nutrition resources for each group:

- ☐ Black/African American
- ☐ Caucasian
- ☐ Chinese
- ☐ Filipino
- ☐ Hispanic/Latino/Spanish
- ☐ Japanese
- ☐ Korean
- ☐ Native Hawaiian/Part-Hawaiian
- ☐ Samoan
- ☐ Micronesian
- ☐ Vietnamese
- ☐ Other (please specify group and level of need)

[For Question #17, participants are asked to rank their needs as high need, moderate need, low need or no need]

17. In your work, identify the level of need for the following nutrition education topics:

- ☐ Nutrition in Pregnancy
- ☐ Infant and Toddler
- ☐ Nutrition
- ☐ Childhood Nutrition
- ☐ Nutrition for Teens
- ☐ Nutrition in the Aging and Elderly
- ☐ Low Fat/Low Cholesterol
- ☐ Low Sodium
- ☐ Renal
- ☐ Weight Control
- ☐ Diabetes
- ☐ Fiber (high or low)
- ☐ Gluten Restricted
- ☐ Other (please specify topic and level of need)

APPENDIX A: HAND 2014 SURVEY (page 5)

[For Question #18, participants are asked to rank their needs as high need, moderate need, low need or don't know]

18. Given the following choices of education tools, please indicate your level of need for each:

- ☐ Educational Modules (or Lesson Plans)
- ☐ Printable FAQs (Frequently Asked Questions)
- ☐ Printable (PDFs) Fact Sheets
- ☐ Recipes using Local Foods (with nutrient analysis)
- ☐ Videos (i.e. short demos on how to prepare local produce)

19. Do your clients/patients have access to the internet?

- ☐ Yes
- ☐ No
- ☐ If yes, please specify, where:

20. Do your clients/patients seek nutrition information on the internet?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

21. Do you use the internet to gather nutrition information and/or resources for your work?

- ☐ Yes
- ☐ No

22. In the past 12 months, estimate how often you used the internet for your nutrition related work:

- ☐ Daily
- ☐ Almost daily (2-6 times/week)
- ☐ Weekly (at least once/week)
- ☐ Almost weekly (at least once every other week)
- ☐ Monthly (at least once/month)
- ☐ Bimonthly (at least once every other month)
- ☐ Quarterly (at least once/3 months)
- ☐ Rarely (at least once or twice/year)
- ☐ Never

APPENDIX A: HAND 2014 SURVEY (page 6)

23. Which of the following resources do you typically use for nutrient analysis? (check all that apply)

- ☐ Bowes and Church's: Food Values of Portions Commonly Used
- ☐ Food Processor
- ☐ Hawai'i Foods Website
- ☐ Nutritionist IV or V
- ☐ USDA Food Surveys Research Group: "What's in the Foods You Eat" Search Tool
- ☐ USDA Nutrient Data Laboratory - National Nutrient Database for Standard Reference
- ☐ USDA SuperTracker
- ☐ I don't typically use any of the above resources
- ☐ Other (please specify)

24. Have you ever visited the Hawai'i Foods Website?

- ☐ Yes
- ☐ No

25. In the past 12 months, how often have you visited Hawai'i Foods Website?

- ☐ Daily
- ☐ Almost daily (2-6 times/week)
- ☐ Weekly (at least once/week)
- ☐ Almost weekly (at least once every other week)
- ☐ Monthly (at least once/month)
- ☐ Bimonthly (at least once every other month)
- ☐ Quarterly (at least once/3 months)
- ☐ Rarely (at least once or twice/year)
- ☐ Never

[For Question #26, participants are asked to rank the usefulness as most useful, somewhat useful, not useful, don't know]

26. For each of the following tools in the Hawai'i Foods Website, rate the usefulness of each in your work:

- ☐ Ability to search individual foods by category or group (Browse tab)
- ☐ Nutrient content of individual foods (Search tab)
- ☐ Nutrient analysis of more than one food (24-hour recall, etc. - Learn tab)
- ☐ Photos of food
- ☐ Publications (Discover tab)
- ☐ Recipes (Discover tab)
- ☐ List of related web links (Discover tab)
- ☐ Other (please specify tool and level of usefulness)

APPENDIX A: HAND 2014 SURVEY (page 7)

27. Have you referred others to the Hawai'i Foods Website?

- ☐ Yes
- ☐ No

28. To whom have you referred to the Hawai'i Foods Website? (check all that apply)

- ☐ Clients/Patients
- ☐ Family
- ☐ Friends
- ☐ Professional colleagues
- ☐ Students
- ☐ Other (please specify)

29. How can the Hawai'i Foods Website (www.hawaiifoods.hawaii.edu) be improved?

30. Any other comments/suggestions?

31. To better understand the needs of nutrition educators and their clients, we intend to conduct a follow up telephone survey which will require about 10 minutes. Information provided in the follow up survey will be confidential, and participation is voluntary. If you are willing to assist with the telephone survey, please provide the following information so that we can schedule a convenient time for the interview.

We will contact you via email to confirm the time and date of the interview.

Mahalo for your assistance!

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey

1. Consent to Participate

1. Please select one of the following:

- ☐ I consent to participate in the research study: "Exploring Dietetics Practice in the Diverse Pacific Region"
- ☐ I am not interested in participating at this time. (thank you)

Exploring Dietetics Practice in the Diverse Pacific Region

2. Consent to be audio-taped

2. Please select one of the following:

- ☐ Yes, I consent to the digital recording of the interview portion of this research study.
- ☐ No, I do not consent to digital recording of the interview portion of this Research study.

Exploring Dietetics Practice in the Diverse Pacific Region

3. Pre-interview survey

3. Are you a Registered Dietitian Nutritionist (RDN)?

- ☐ Yes
- ☐ No

4. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey (page 2)

5. What is your current work setting?

- ☐ Acute/inpatient
- ☐ Ambulatory/outpatient/dialysis
- ☐ Community or public health nutrition/health center
- ☐ Long term care/extended care/assisted living
- ☐ Private practice
- ☐ Other (please specify)

6. What is the highest level of education you've completed?

- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctoral degree
- ☐ Other (please specify)

7. How many years have you been practicing as a RDN?

- ☐ 0-3 years
- ☐ 3-5 years
- ☐ 5-10 years
- ☐ 10-15 years
- ☐ More than 15 years
- ☐ Other (please specify)

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey (page 3)

8. How many years have you practiced in the US Affiliated Pacific (USAP)? (the USAP includes American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Hawai'i, Republic of Palau, and the Republic of the Marshall Islands)

☐ 0-3 years

☐ 3-5 years

☐ 5-10 years

☐ 10-15 years

☐ > 15 yr

9. In the USAP region, please check all the areas you have practiced dietetics:

☐ American Samoa

☐ Commonwealth of the Northern Mariana Islands

☐ Federated States of Micronesia

☐ Guam

☐ Hawai'i

☐ Republic of Palau

☐ Republic of Marshall Islands

☐ Other (please specify)

10. Have you had training in the area of "Cultural Competency"?

☐ Yes

☐ No

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey (page 4)

Exploring Dietetics Practice in the Diverse Pacific Region

4. Cultural Competency Training

For the purposes of this pre-interview survey, we are asking about the concept of Cultural Competency. We realize there may be other trainings or theories of practice. You will have the opportunity to share more, within the context of your practice, in the interview portion of this study.

11. In your current position, are you required to take a cultural competency training course?

☐

Yes

☐

No

☐

Other (please specify)

12. How often do you take a cultural competency training course?

☐

More than once per year

☐

Once per year

☐

Once only

☐

Never

☐

N/A

☐

Other (please specify)

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey (page 5)

13. How is the cultural competency training provided to you? (check all that apply)

- ☐ Online training
- ☐ In-class session(s)
- ☐ Self-guided training manual
- ☐ N/A
- ☐ Other (please specify)

14. How is your learning of the cultural competency training measured? (check all that apply)

- ☐ Quizzes or exams
- ☐ Discussion with trainers/supervisors/co-workers
- ☐ Work performance evaluation
- ☐ Patient/client questionnaires/satisfaction surveys
- ☐ N/A
- ☐ Other (please specify)

15. Who and/or what organization have provided cultural competency training for you?

16. How useful is cultural competency training in your practice of dietetics? (check best answer)

- ☒ Most useful
- ☐ Somewhat useful
- ☐ Not useful
- ☒ Don't know
- ☒ N/A
- ☒ Other (please specify)

APPENDIX B: Exploring Dietetics Practice in the Diverse Pacific Region Pre-Interview Survey (page 6)

Exploring Dietetics Practice in the Diverse Pacific Region

5. Completing the survey

17. We are looking for RDNs who provide direct services in the USAP region.

Do you know anyone who may be interested in participating in this research study?

☐

No, not at this time.

☐

Yes, see comments below:

For any other RDNs who you think may be interested in participating, please provide their names and contact information: (Mahalo):

18. To schedule an interview with the researchers (Cyndy Endrizal and Kainoa Fialkowski), please give us three potential dates and times within the time frame of **June 1, 2016 - June 30, 2016**. If you are unavailable between June 1-30, 2016, please contact Cyndy at (808)223-3957 or kahalewa@hawaii.edu to schedule another time.

	MM		DD		YYYY		hh		mm		AM/PM
Date / Time	<input type="text"/>	/	<input type="text"/>	/	<input type="text"/>		<input type="text"/>	:	<input type="text"/>		<input type="text"/>
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19. Lastly, please provide your name, contact number and/or email address(s) for us to contact you to verify a time and date for the interview at your convenience. Mahalo.

APPENDIX C: Key Informant Interview Questions

Questions with (*) are probing questions to main questions 1-12.

1. Tell me about the populations that you serve without disclosing any identifiable information.

- *What are the age group ranges?

- *What are their ethnic backgrounds?

- *What are some of their nutrition-related problems?

- *How have you learned about the populations that you serve?

2. What would you like to share about your work that feels most meaningful to you?

- *Why does it feel meaningful?

3. What have you found as challenging in your work when trying to provide direct services?

(Definition of direct services: Nutrition screening, assessment, diagnosis, intervention, education, counseling, monitoring and evaluation. Services are provided directly to patients, clients, residents, groups)

- *What would you do differently if you could change something?

4. Have you found certain groups to be more challenging to interact with?

- *If so, tell me about that.

5. Have you had some kind of formal training that has helped in your work, specifically in relation to the populations that you serve?

- *If so, tell me about it.

6. How do you build relationships with those that you serve?

7. How would you create an environment of respect, trust, acceptance, caring, empathy?

- *Any examples you'd like to share?

APPENDIX C: Key Informant Interview Questions (page 2)

8. Do you set goals with populations that you serve?

*How is this accomplished?

9. Do you feel any kind of power imbalance in your interactions?

*If you feel this in your work, tell me about that.

10. How do you assess, monitor and evaluate your interactions or interventions?

11. Anything else you'd like to share?

12. Who else would you suggest we contact to participate in this research?